S/M No. : TCN011NEF1

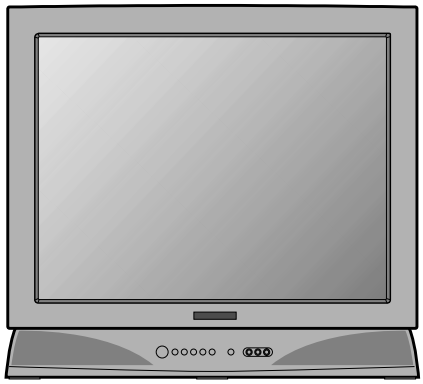
Service Manual

Color Television

CHASSIS : CN-011N

Model :
DTQ-29S4FC
DTQ-29S4SC
DTQ-29S4SS

U.S.A
Canada



■SPECIFICATIONS

ITEMS \ MODEL	DTQ-29S4FC	DTQ-29S4SC	DTQ-29S4SS
TV STANDARD	NTSC-M		
POWER INPUT	AC 120V 60Hz		
POWER CONSUMPTION	100W		
TUNING SYSTEM	Frequency Synthesizer(FS)Tuning System		
TUNING RANGES	VHF:2~13(12) UHF:14~69(65) CATV:1~125(125)		
SOUND OUTPUT	1.8W×1.8W		
SPEAKER	3W 8ohm		
ANTENNA INPUT IMPEDANCE	75ohm Unbalanced		
AUXILIARY INPUT TERMINAL	Front : Video, Audio Rear:Video, Audio		
INTERMEDIATE FREQUENCIES	Picture IF Carrier Frequency :45.75MHz Sound IF Carrier Frequency :41.25MHz Color Sub-Carrier Frequency :42.17MHz		
REMOTE CONTROL	R-43A01		
SPECIAL FUNCTIONS	3-Language OSD With CAPTION Wake-up On/Off Time Sleep Timer Power Restore		

✔ Caution

: In this Manual, some parts can be changed for improving, their performance without notice in the parts list. So, if you need the latest parts information,please refer to PPL(Parts Price List) in Service Information Center (http://svc.dwe.co.kr).

DAEWOO ELECTRONICS CO., LTD

http : //svc.dwe.co.kr Feb. 2002

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PRODUCT SAFETY SERVICING GUIDELINES FOR COLOR TELEVISION RECEIVERS

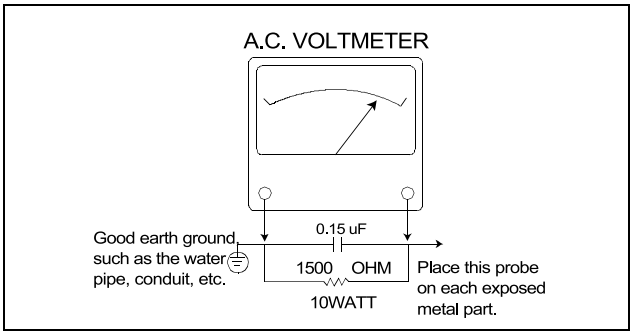
CAUTION : Do not attempt to modify this product in any way. Unauthorized modifications will not only void the warranty, but may lead to your being liable for any resulting property damage or user injury.
Service work should be performed only after you are thoroughly familiar with all of the following safety checks and servicing guidelines. To do otherwise, increases the risk of potential hazards and injury to the user.

SAFETY CHECKS

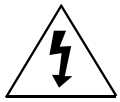
After the original service problem has been corrected, a check should be made of the following:

SUBJECT : FIRE & SHOCK HAZARD

1. Be sure that all components are positioned in such a way as to avoid possibility of adjacent component shorts. This is especially important on those chassis which are transported to and from the repair shop.
2. Never release a repair unless all protective devices such as insulators, barriers, covers, shields, strain reliefs, and other hardware have been reinstalled per original design.
3. Soldering must be inspected to discover possible cold solder joints, frayed leads, damaged insulation (including A.C. cord), solder splashes or sharp solder points. Be certain to remove all loose foreign particals.
4. Check for physical evidence of damage or deterioration to parts and components, and replace if necessary follow original layout, lead length and dress.
5. No leads or components should touch a receiving tube or a resistor rated at 1 watt or more. Lead tension around protruding metal surfaces must be avoided.
6. All critical components such as fuses, flameproof resistors, capacitors, etc. must be replaced with exact factory types. Do not use replacement components other than those specified or make unrecommended circuit modifications.
7. After re-assembly of the set always perform an A.C. leakage test on all exposed metallic parts of the cabinet, (the channel selector knob, antenna terminals, handle and screws) to be sure the set is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this test. Use an A.C. voltmeter, having 5000 ohms per volt or more sensitivity, in the following manner : connect a 1500 ohm 10 watt resistor, paralleled by a 15 mfd. 150V A.C. type capacitor between a known good earth ground (9water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the A.C. voltage across the combination of 1500 ohm resistor and 0.15 MFD capacitor. Reverse the A.C. plug and repeat A.C. voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.75 volts R.M.S. This corresponds to 0.5 milliamp A.C. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

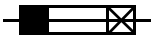

A.C. VOLTMETER
0.15 uF
Good earth ground such as the water pipe, conduit, etc.
1500 OHM
10WATT
Place this probe on each exposed metal part.

GRAPHIC SYMBOLS :



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the service personnel to the presence of uninsulated “dangerous voltage” that may be of sufficienty magnitude to constitute a risk of electric shock.

The exclamation point within an equilateral triangle is intended to alert the service personnel to the presence of important safety information in service literature.



Fuse symbol is printed on pcb adjacent to the fuse, with “RISK OF FIRE REPLACE FUSE AS MARKED”. The symbol is explained in the service manual with the following wording or equivalent.

“CAUTION : FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE (5A, 125V)” and “**ATTENTION**: AFIN D’ASSU UNE PROTECTION PERMANENTE CONTRE LES RISQUES D’INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET DE ”5A, 125V”.

SUBJECT : X-RADIATION

1. Be sure procedures and instructions to all service personnel cover the subject of X-rays in current T.V. receivers is the picture tube. However, this tube does not emit X-rays when the high voltage is at the factory specified level. The proper value is given in the applicable schematic. Operation at higher voltages may cause a failure of the picture tube or high voltage supply and, under certain circumstances, may produce radiation in excess of desirable levels.
2. Only factory specified C.R.T. anode connectors must be used. Degaussing shields also serve as X-ray shield in color sets. Always re-install them.
3. It is essential that the serviceman has available an accurate and reliable high voltage meter. The calibration of the meter should be checked perio - dically against a reference standard. Such as the one available at your distributor.
4. When the high voltage circuitry is operating properly there is no possibility of an X-radiation problem. Every time a color chassis is serviced, the brightness should be run up and down while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly. We suggest that you and your service organization review test procedures so that voltage regulation is always checked as a standard servicing procedure. And that the high voltage reading be recorded on each customer’s invoice.
5. When troubleshooting and making test measurements in a receiver with a problem of excessive high voltage, avoid being unnecessarily close to the picture tub eand the high voltage compartment.
   Do not operate the chassis longer than is necessary to locate the cause of excessive voltage.
6. Refer to HV, B+and Shutdown adjustment procedures described in the appropriate schematic and diagrams(where used).

SUBJECT : IMPLOSION

1. All direct viewed picture tubes are equipped with an integral implosion protection system, but care should be taken to avoid damage during installation. Avoid scratching the tube. If scratched, replace it.
2. Use only recommended factory replacement tubes.

SUBJECT : TIPS ON PROPER INSTALLATION

1. Never install any receiver in closed-in recess, cubbyhole or closely fitting shelf space over, or close to heat duct, or in the path of heated air flow.
2. Avoid conditions of high humidity such as : Outdoor patio installations where dew is a factor. Near steam radiators where steam leakage is a factor, etc.
3. Avoid placement where draperies may obstruct rear venting. The customer should also avoid the use of decorative scarves or other coverings which might obstruct ventilation.
4. Wall and shelf mounted installations using a commercial mounting kit, must follow the factory approved mounting instructions. A receiver mounted to a shelf or platform must retain its original feet(or the equivalent thickness in spacers) to provide adequate are flow across the bottom, bolts or screws used for fasteners must not touch and parts or wiring. Perform leakage test on customized installations.
5. Caution customers against the mounting of a receiver on sloping shelf or a tilted position, unless the receiver is properly secured.
6. A receiver on a roll-about cart should be stable on its mounting to the cart. Caution the customer on the hazards of trying to roll a cart with small casters across thresholds or deep pile carpets.
7. Caution customers against the use of a cart or stand which has not been listed by underwriters laboratories, inc. For use with their specific model of television receiver or generically approved for use with T.V. 's of the same or larger screen size.

SPECIFICATIONS

MODEL / ITEMS	DTQ-29S4FC	DTQ-29S4SC	DTQ-29S4SS	REMARKS
TV STANDARD	NTSC-M			
POWER INPUT	AC 120V 60 Hz			
POWER CONSUMPTION	100W			
TUNING SYSTEM	Frequency Synthesizer (FS) Tuning System			
TUNING RANGES	VHF : 2 ~ 13 (12) UHF : 14 ~ 69 (56) CATV : 1 ~ 125 (125)			
SOUND OUTPUT	1.8W × 1.8W			
SPEAKER	3 W 8 ohm			
ANTENNA INPUT IMPEDANCE	75 ohm Unbalanced			
AUXILIARY INPUT TERMINAL	Front : Video, Audio Rear : Video, Audio			
INTERMEDIATE FREQUENCIES	Picture IF Carrier Frequency : 45.75 MHz Sound IF Carrier Frequency : 41.25 MHz Color Sub-Carrier Frequency : 42.17 MHz			
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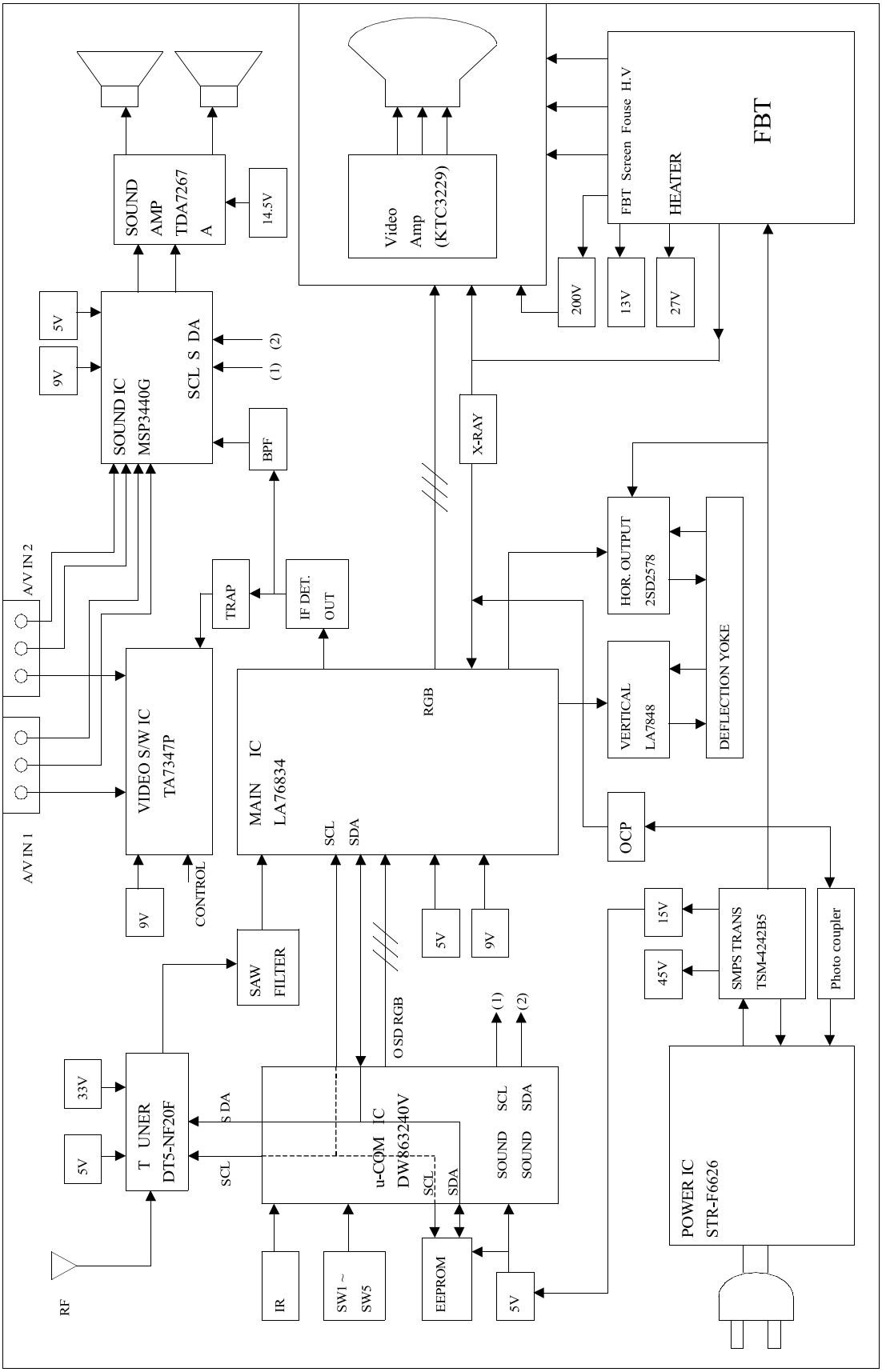
SPECIAL FUNCTIONS	3-Language OSD With CAPTION Wake-up On/Off Time Sleep Timer Power Restore			

CIRCUIT BLOCK DIAGRAM



ALIGNMENT INSTRUCTIONS

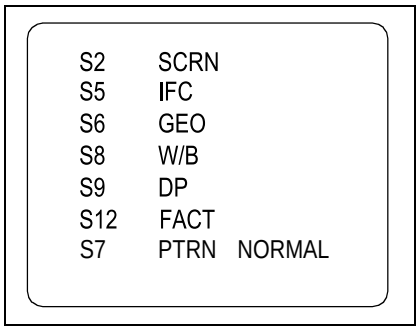
1. SERVICE MODE ADJUSTMENTS

Follow the steps below whenever service adjustment is required. See Table- A and Table- B to determine if service adjustments are required.

1) How to enter the service mode using the user remote control.

- Turn the set on.
- Direct the remote control to the reception window of TV.
- Push buttons of remote control in sequence as follows.

  1 → MUTE → DISPLAY → MUTE
- Then, the screen will appear as follows.



- Using the channel up or channel down button, select the item you wish to adjust.
  (The color of selected item turns into the red.)
- Press the volume up or down button to enter in the service mode you wish to adjust.

2) How to memorize the adjusted values in the service mode.

- Must press **DISPLAY** button the state which the screen is displaying each of service menus after all adjustments are completed each of all service menu.

Table-A : Adjust the values of service mode when a part is replaced.

PART REPLACED	ADJUSTMENT		NOTES
	NECESSARY	UNNECESSARY	
I701 (U-COM)		O	Data is stored in I702.
I101 (MAIN)		O	
I70 2 (EEPROM)	O		Initial setting values are written from I701. ADJUSTING ITEMS S5 RFAGCD S6 H.PHASE/V.POSI/V.SIZE S8 RD/GD/BD/RB/GB/BB S9 Subbrightness
CRT	O		Adjust items related to picture tube only.(White Balance adjustment)

Table-B

MODE	ADJUSTMENT	DATA		REMARKS
		INITIAL	RANGE	
S2	Screen Adjustment			
S5	Auto RF AGC			
	Video Level (VIDEOL)	7	0~7	Must be set to 7
	RF AGC Delay (RFAGCD)	30	0~63	Align RF AGC threshold
	FM Level (FM.LEV)	20	0~31	Must be set to 20
	AGC Point	3.75		Select AGC reference voltage
	A/D VALUE			
S6	H-PHASE	10	0~31	Align sync flyback pulse, using internal cross pattern(S7)
	H-SIZE	43	0~127	
	P-CUSHION	32	0~63	
	V-POSI	29	0~63	Align Vertical DC bias, using internal cross pattern(S7)
	V-SIZE	110	0~127	Align Vertical amplitude, using internal cross pattern(S7)
	V-LIN	13	0~31	Must be set to 16
	V-S	12	0~31	
	TILT	37	0~63	
	TOP-C	8	0~15	
	BOT-C	8	0~15	
	V-SIZE-C	7	0~7	
	NO SD POWER OFF	YES		Automatically turn off in 15min for no received signal.
S7-1	ABL-POINT	0		
	BK-LEVEL	0		
	BK-START	3		
	BRI-STOP	0		
	Y-CORING	0		
	PRE-SHOOT	3		
	DC-REST	3		
	W.PEAK	1		
	FIESH	0		
	OSD-GAIN	0		
	OSD-GRAY	0		
	OSD-SW	0		
	HT-SW	0		
	HT-LEVEL	0		
S7-2	C-BPF	0		
	C-KILL	1		
	RB-ANGLE	15		
	G-ANGLE	0		
	C-EXT	0		
	FILTER	1		
	TRAP-TEST	0		
	CORING-GN	3		
	H-SIZE-CP	4		
S8	Red Drive (RD)		0~127	Align RED OUT AC level
	Green Drive (GD)	15	0~15	Must be set to 10
	Blue Drive (BD)		0~127	Align BLUE OUT AC level
	Red Bias (RB)		0~255	Align RED OUT DC level
	Green Bias (GB)	127	0~255	Align GREEN OUT DC level
	Blue Bias (BB)		0~255	Align BLUE OUT DC level
S8-2	SCR R-BIAS	0	0~255	
	SCR G-BIAS	127	0~255	
	SCR B-BIAS	0	0~255	
	SCR R-DRIVE	64	0~127	
	SCR G-DRIVE	10	0~127	
	SCR B-DRIVE	64	0~127	
	SCR BRIGHT	110	0~127	
S9	SUB BRIGHT	90	0~127	
	CONTRAST	27	0~127	
	TINT	35	0~127	
	COLOR	27	0~127	
	SHARPNESS	7	0~127	
	FM/AM PRE	33	0~127	
	SCART PRE	33	0~127	
	MONI. VOL	60	0~127	
S11	Internal Black			Display Internal Black Pattern
	Internal 100% White			Display Internal 100% White
	Internal 60% White			Display Internal 60% White
	Internal Cross Pattern			Display Internal Cross Pattern
S12	Forwarding Mode			Factory Initialization

2. ASSEMBLY ADJUSTMENTS

1) SCREEN ADJUSTMENT (S2)

- Enter the service mode and select service adjustment S2.
- You can see the one horizontal line on the screen.
- Adjust the Screen Control Volume (located on FBT) so that the horizontal line onscreen may be disappeared.
- Press the volume up or down button to exit in the screen adjustment mode.

NOTE

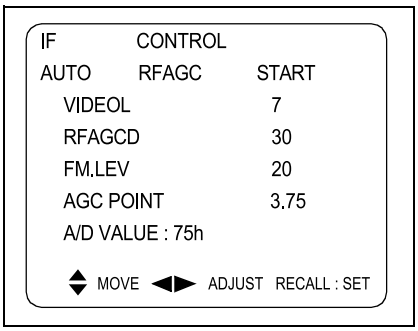
IN THE SCREEN ADJUSTMENT MODE, DONT PRESS OTHER BUTTONS EXCEPT VOLUME UP OR DOWN BUTTON.

2) FOCUS ADJUSTMENT

- Turn in a local station and adjust the Focus Control knob (located on FBT) for best picture details at high light condition.

3) RF AGC DELAY ADJUSTMENT (S5)

- Receive a good local channel.
- Enter the service mode and select service adjustment S5.
- You can see the OSD as shown in below.

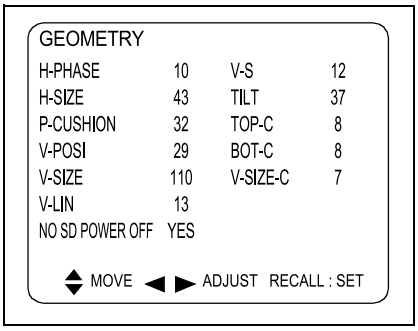


- Select RFAGCD item, press the volume up or down button until noise or beat in picture disappears.
- Press the DISPLAY button to memorize the data.

4) GEOMETRIC ADJUSTMENTS (S6)

- Enter the service mode and select service adjustment S11.
- Whenever you select the “S11” using the volume up or down button, the screen is changing like this.

- Using the volume up or down button, select internal cross pattern.
- Select service adjustment S6
- You can see the OSD as shown in below.



4-1. Horizontal Position Adjustment

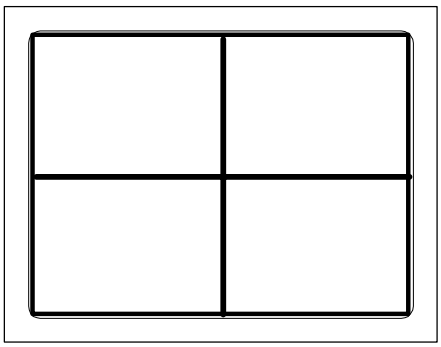
- Select H.PHASE item, adjust H.PHASE data value to obtain proper horizontal centering of the internal cross pattern at the left and right of the screen.

4-2. Vertical Position Adjustment

- Select V.POSI item, adjust V.POSI data value to center the raster properly on thescreen.

4-3. Vertical Size Adjustment

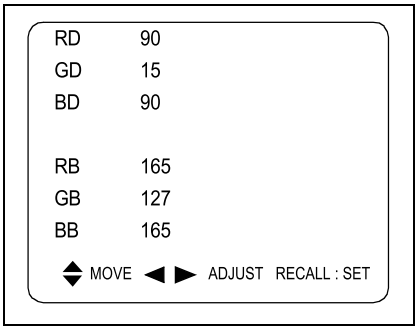
- Select “V.SIZE” item, adjust “V.SIZE” data value to proper vertical size as follows.



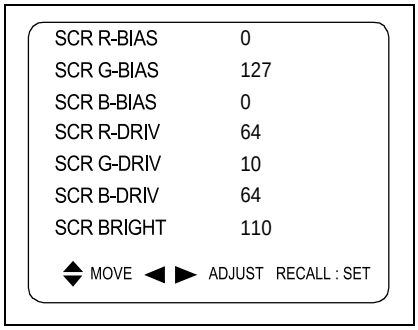
5) WHITE BALANCE ADJUSTMENT(S8)

- Receive a good local channel.
- Enter the service mode and select service adjustment S8.
- You can see the OSD as shown in below.

S8-1



S8-2

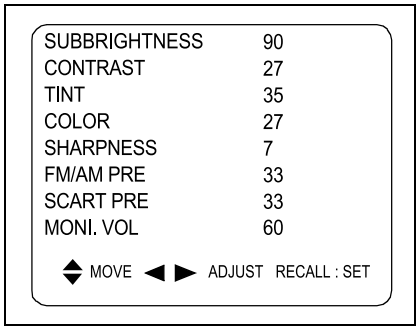


- Using volume up or volume down, adjust service adjustment data of RD/GD/BD and RB/GB/BB until a good gray scale with normal whites is obtained.ALIGNMENT INSTRUCTIONS
- Press the DISPLAY button to memorize the data.

6) DIGITAL PRESET(D.P) ADJUSTMENTS(S9)

SUBBRIGHTNESS ADJUSTMENT

- Receive a good local channel.
- Enter the service mode and select service adjustment S9.
- You can see the OSD as shown in below.



- Select Subbrightness item, adjust Subbrightness data value to obtain normal brightness level.
- Press the DISPLAY button to memorize the data.

CONTRAST

- Fixed value = 27

TINT

- Fixed value = 35

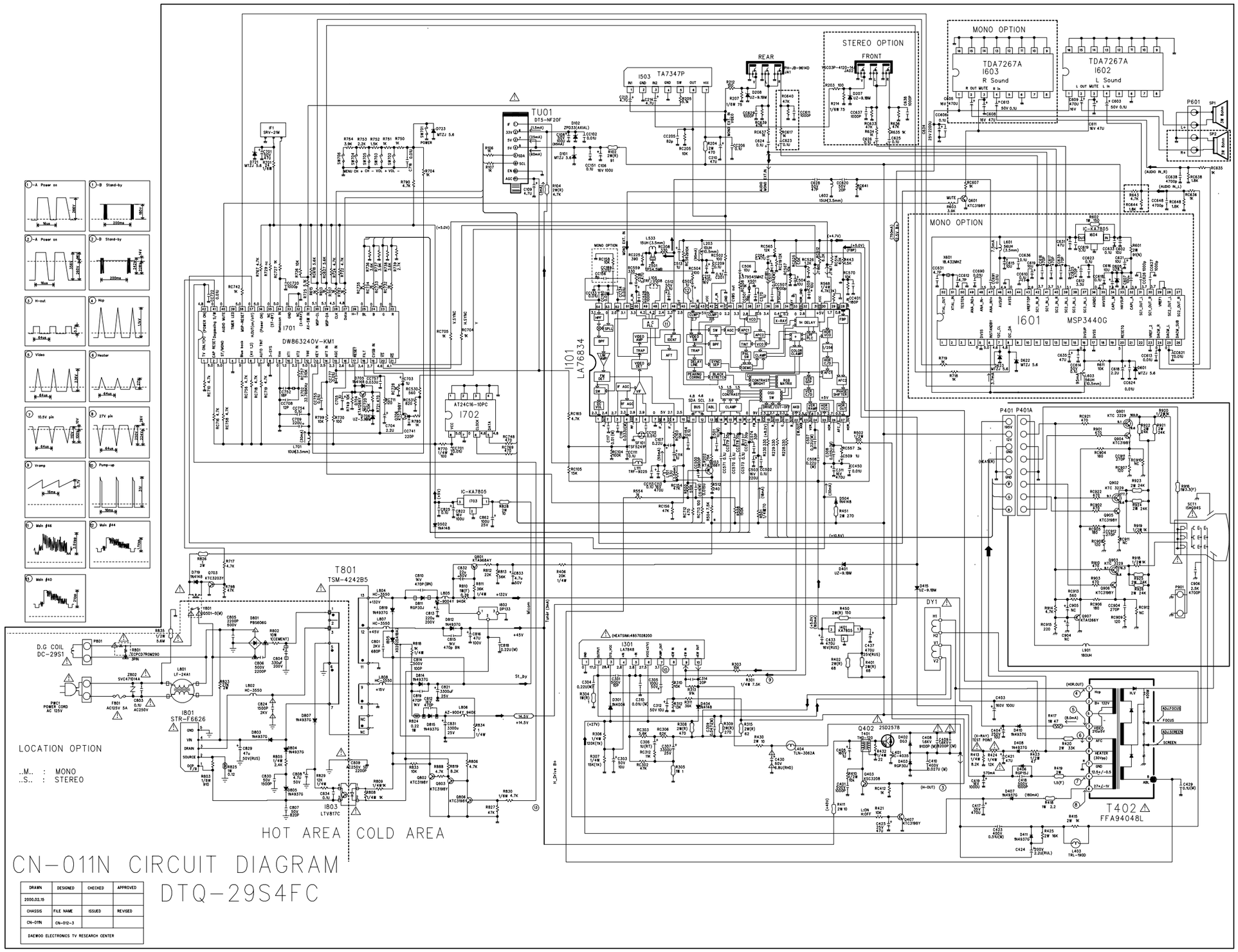
COLOR

- Fixed value = 27

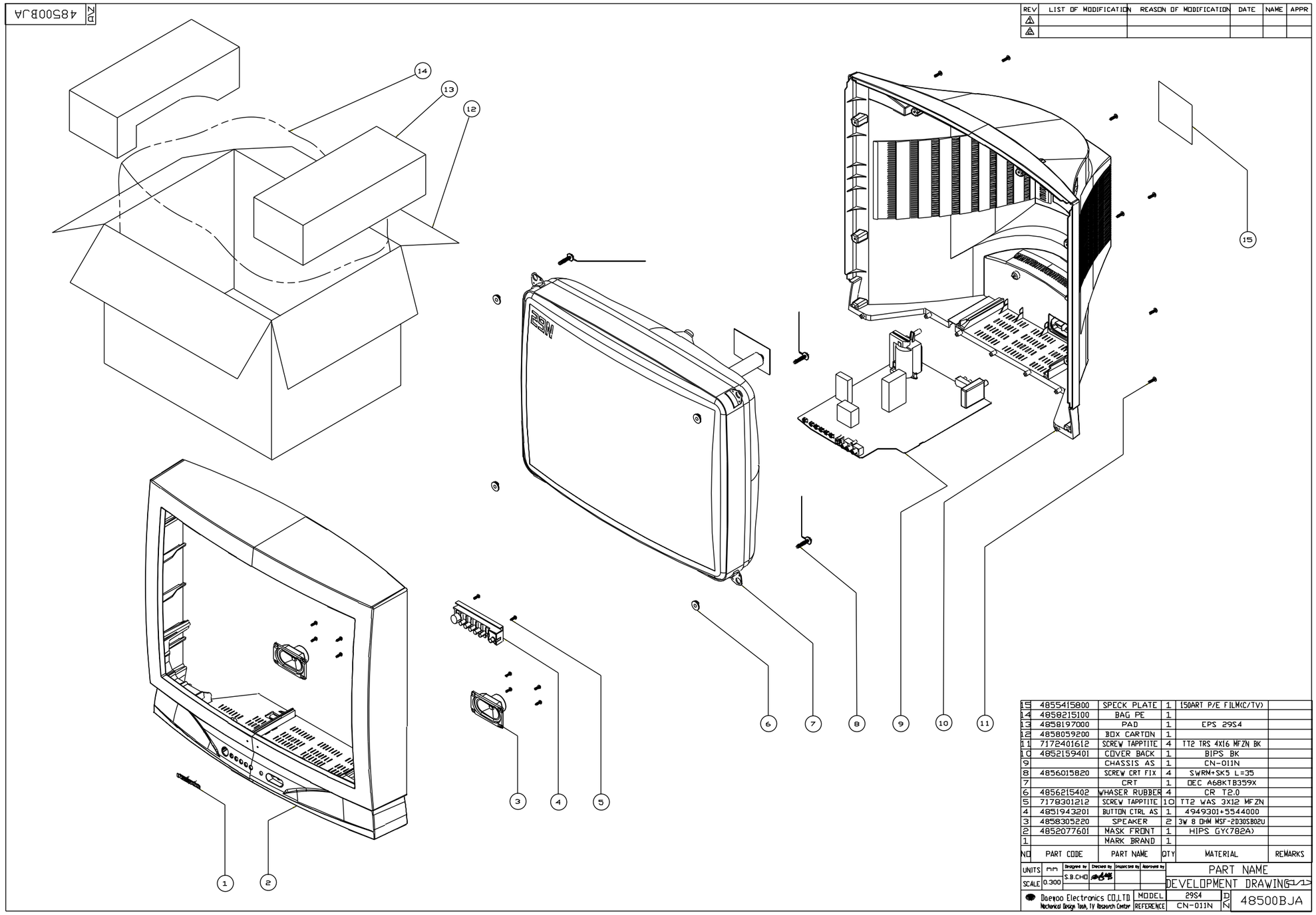
7) FACTORY OUTGOING MODE (S12 : FACT)

- If you select the S12, then the set becomes factory outgoing status.
- You can see the OSD “outgoing OK”

SCHEMATIC DIAGRAM



EXPLODED VIEW



NO	PART CODE	PART NAME	QTY	MATERIAL	REMARKS
15	4855415800	SPECK PLATE	1	150ART P/E FILM(C/TV)	
14	4858215100	BAG PE	1		
13	4858197000	PAD	1	EPS 29S4	
12	4858059200	BOX CARTON	1		
11	7178401612	SCREW TAPPTITE	4	TT2 TRS 4X16 MFZN BK	
10	4852159401	COVER BACK	1	BIPS BK	
9		CHASSIS AS	1	CN-011N	
8	4856015820	SCREW CRT FIX	4	SWRM+SK5 L=35	
7		CRT	1	DEC A68KTB359X	
6	4856215402	WHASER RUBBER	4	CR T2.0	
5	7178301212	SCREW TAPPTITE	10	TT2 WAS 3X12 MFZN	
4	4851943201	BUTTON CTRL AS	1	4949301+5544000	
3	4858305220	SPEAKER	2	3W 8 OHM MSF-2D30SB02U	
2	4852077601	MASK FRONT	1	HIPS GY(782A)	
1		MARK BRAND	1		

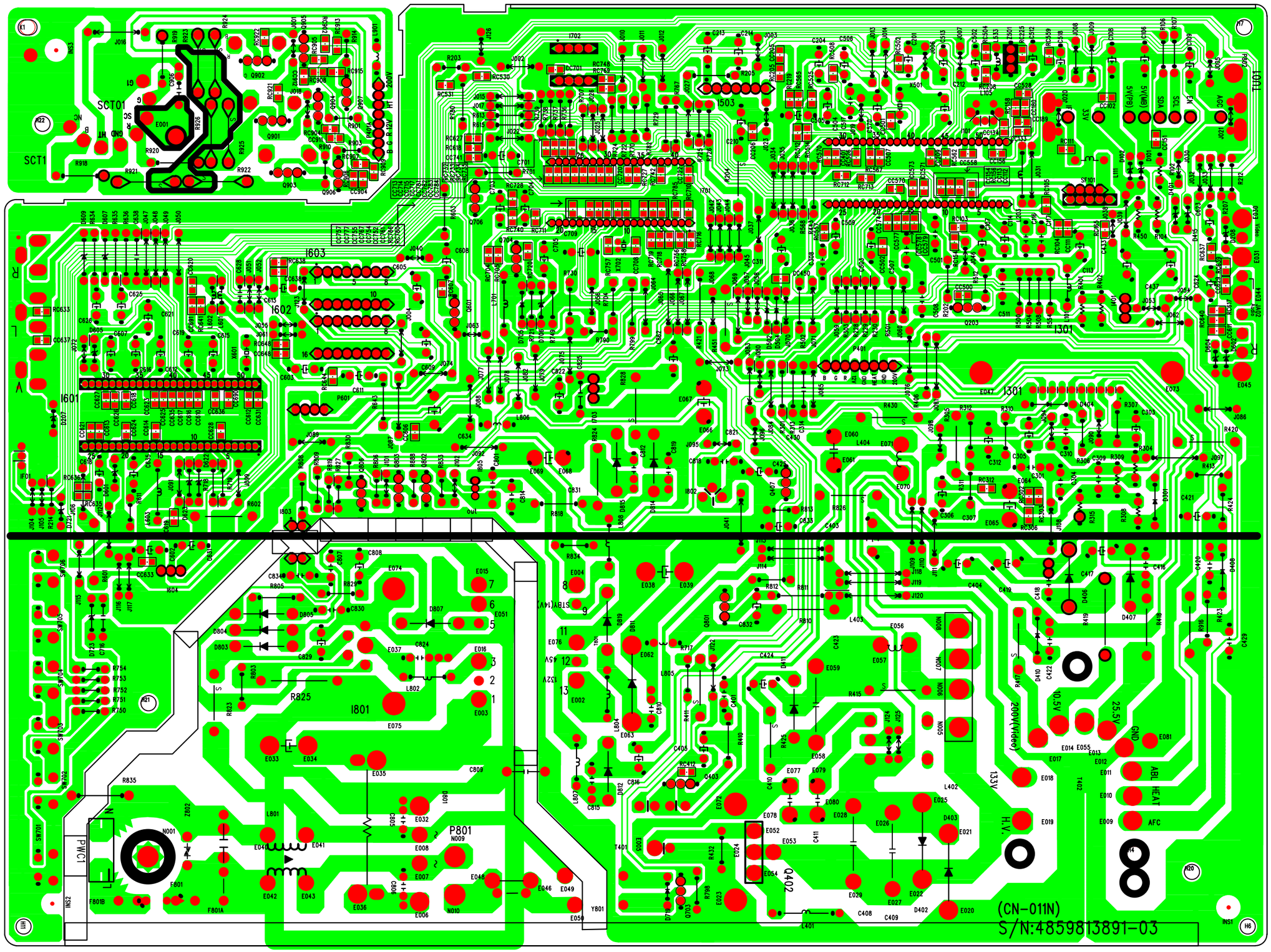
UNITS	mm	Designed by	Checked by	Inspected by	Approved by
SCALE	0.300	S.B.CHO			

PART NAME: DEVELOPMENT DRAWING (1/1)

Daewoo Electronics CO.,LTD
Mechanical Design Team, TV Research Center

MODEL: 29S4
REFERENCE: CN-011N
ID NO: 48500BJA

PRINTED CIRCUIT BOARD



SERVISE PARTS LIST

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LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
ZZ100	48B4343A01	TRANSMITTER REMOCON	R-43A01 (AA)	
ZZ110	PTACPWJ882	ACCESSORY AS	DTQ-29S4FC	
00020	48586054K1	MANUAL INSTRUCTION	DTM-2082CW	
M821	4858213800	BAG INSTRUCTION	L.D.P.E T0.05X250X400	
ZZ120	PTBCSHJ882	COVER BACK AS	DTQ-29S4FC	
M211	4852159400	COVER BACK	FR HIPS BK	
M781	4857817630	CLOTH BLACK	FELT 400X20X0.7	
ZZ130	PTPKCPJ882	PACKING AS	DTQ-29S4FC	
10	6520010100	STAPLE PIN	AUTO W65	
M801	4858059200	BOX CARTON	SW-4	
M811	4858197000	PAD	EPS 29S4	
M822	4858215100	BAG P.E	PE FOAM t0.5x1430x1270	
ZZ131	58G0000143	COIL DEGAUSSING	DC-29S1	
ZZ132	48519A6210	CRT GROUND AS	GND LINE IEA 29	
ZZ140	PTCACAJ882	CABINET AS	DTQ-29S4FC	
M201A	4856215402	WASHER RUBBER	CR T2.0	
M201B	4856015830	SCREW CRT FIX	L=32	
M211A	7172401612	SCREW TAPPTITE	TT2 TRS 4X16 MFZN BK	
M541	4855415800	SPEC PLATE	150ART P/E FILM (C/TV)	
SP01A	7178301011	SCREW TAPPTITE	TT2 WAS 3X10 MFZN	
SP02A	7178301011	SCREW TAPPTITE	TT2 WAS 3X10 MFZN	
V901	4859633760	CRT	A68KTB359X001(B) P50	
ZZ200	PTFMSJJ882	MASK FRONT AS	DTQ-29S4FC	
M191	4851943200	BUTTON CTRL	4949300+5544000	
M191A	7178301011	SCREW TAPPTITE	TT2 WAS 3X10 MFZN	
M201	4852077600	MASK FRONT	FR HIPS GY(782A)	
M201A	4857817610	CLOTH BLACK	FELT 300X20X0.7	
M561	4855617400	MARK BRAND	CU AU+ABS BK	
ZZ210	PTSPPWJ882	SPEAKER AS	DTQ-29S4FC	
P601A	4850704S27	CONNECTOR	YH025-04+35098+ULW=400	
SP01	4858305220	SPEAKER	SP-5090F01	
SP02	4858305220	SPEAKER	SP-5090F01	
ZZ290	PTMPMSJ882	PCB MAIN MANUAL AS	DTQ-29S4FC	
10	2193102005	SOLDER BAR	SN:PB=63:47 S63S-1320	
30	2291050616	FLUX SOLDER	JS-64T3	
40	2291050301	FLUX SOLVENT	IM-1000	
C307	CEYF1E332V	C ELECTRO	25V RSS 3300MF (16X31.5)	
C408	CMYH3C912J	C MYLAR	1.6KV BUP 9100PF J	
C409	CMYH3C822J	C MYLAR	1.6KV BUP 8200PF J	
C410	CMYE2G273J	C MYLAR	400V PU 0.027MF J	
C423	CMYE2G514J	C MYLAR	400V PU 0.51MF J	
C430	CEYD1H689W	C ELECTRO	50V RHD 6.8MF (16X35.5)	
C803	CL1UC3104M	C LINE ACROSS	WORLD AC250V 0.1UF M R.47	
C804	CEYN2D331P	C ELECTRO	200V LHS 330MF	
C809	CH1BFE222M	C CERA AC	U/C/V AC400V 2200PF	
C813	CEYN2D221T	C ELECTRO	200V FWS 220MF (22X30)	
C821	CEYF1E332V	C ELECTRO	25V RSS 3300MF (16X31.5)	
C824	CBYB3D152K	C CERA SEMI	2KV BL(N) 1500PF K	
C831	CEYF1E332V	C ELECTRO	25V RSS 3300MF (16X31.5)	
D402	DDG3———	DIODE	DG3	
D403	DRGP30J—-	DIODE	RGP30J	
D801	DPBS606GU-	DIODE BRIDGE	PBS606G	
D811	DRGP30J—-	DIODE	RGP30J	
F801	5F1GB5021L	FUSE GLASS TUBE	CSA/UL 125V 5A	
I101	1LA76834—	IC MAIN	LA76834	
I301	PTC2SW8202	HEAT SINK ASS`Y	1LA7848—- + 7174300811	
00001	1LA7848—-	IC VERTICAL	LA7848	
0000A	4857028202	HEAT SINK	AL EX BK	
0000B	7174300811	SCREW TAPPTITE	TT2 RND 3X8 MFZN	
I401	1K1A7805P1	IC REGULATOR	KIA7805API	
I503	1TA7347P—	IC SWITCH	TA7347P	
I601	1MSP3420B8	IC SOUND PROCESSOR	MSP3420G-P0-B8	
I602	1TDA7267A-	IC AMP	TDA7267A	
I603	1TDA7267A-	IC AMP	TDA7267A	
I604	1KA7805—-	IC REGULATOR	KA7805	
I701	1DW8632LA2	IC MICOM	DW863240V-LA2	
I702	1AT24C16PC	IC	AT24C16-10PC	
I703	1K1A7805P1	IC REGULATOR	KIA7805API	
I801	PTF2SW7701	HEAT SINK ASS`Y	1STRF6626- + 7174300811	
I801	1STRF6626-	IC POWER	STR-F6626	
I801A	4857027701	HEAT SINK	AL EX	
I801B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN	
I802	1DP133——	IC ERROR AMP	DP133	
I803	1LTV817C—	IC PHOTO COUPLER	LTV-817C	
I805	TX0202DA—	THYRISTOR	X0202DA1BA2	
IF01	1SRV21M—-	IC PREAMP	SRV-21M	
JA01	4859108450	JACK PIN BOARD	YSC03P-4120-14A	
JA02	4859109250	JACK PIN BOARD	PH-JB-9614A	
L105	58N0000042	COIL VCO	TRF-V008	
L403	58H0000047	COIL H-LINEARITY	TRL-190D	
L404	58C7070085	COIL CHOKE	TLN-3062A	
L801	5PLF24A1—	FILTER LINE	LF-24A1	
P401A	4850708N08	CONNECTOR	BIC-08T-25T+C-20T+ULW=400	
PWC1	4859907810	CORD POWER AS	ME301P+TER=2100	
Q402	PTB2SW7609	HEAT SINK ASS`Y	T2SD2578— + 7174300811	
00001	T2SD2578—	TR	2SD2578	
0000A	4857027609	HEAT SINK	AL EX	
0000B	7174300811	SCREW TAPPTITE	TT2 RND 3X8 MFZN	
Q403	TKTC3229—	TR	KTC3229	
Q801	TKTA968AY-	TR	KTA968AY	

"⚠"is a safety part, so it must be used the same part.
"Ⓡ"is a recommendable part for essential stock.

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
Q901	PTL2SW6900	HEAT SINK ASS`Y	TKTC3229— + 7174301011	
00001	TKTC3229—	TR	KTC3229	
0000A	4857026900	HEAT SINK	AL EX	
0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN	
Q902	PTL2SW6900	HEAT SINK ASS`Y	TKTC3229— + 7174301011	
00001	TKTC3229—	TR	KTC3229	
0000A	4857026900	HEAT SINK	AL EX	
0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN	
Q903	PTL2SW6900	HEAT SINK ASS`Y	TKTC3229— + 7174301011	
00001	TKTC3229—	TR	KTC3229	
0000A	4857026900	HEAT SINK	AL EX	
0000B	7174301011	SCREW TAPPTITE	TT2 RND 3X10 MFZN	
R801	DPB3R0M140	POSISTOR	2322 662 96693	
R802	RX10B109JQ	R CEMENT	10W 1 OHM J BEN 25MM 4P	
SCT1	4859303830	SOCKET CRT	ISHG94S	
SF101	5PTSF5241P	FILTER SAW	TSF5241P	
T401	5TD0000018	TRANS DRIVE	THD-120	
T402	50H0000222	FBT	BSC29-0197	
T801	50M4242B5-	TRANS SMPS	TSM-4242B5	
TU01	4859719130	TUNER VARACTOR	DT5-NF20F	
X601	5XE18R432E	CRYSTAL QUARTZ	HC-49/U 18.43200MHZ 30PPM	
X702	5XYR03276C	CRYSTAL QUARTZ	C-001R 32.768000KHZ 20PPM	
Y801	5SC0101338	SW RELAY	DQ5D1-O(M)/GJ-SS-105LM	
Z501	5PYXT4R5MB	FILTER CERA	XT 4.5MB	
Z802	DSVC471D14	VARISTOR	SVC471D14A	
ZZ200	PTMPJ2J882	PCB CHIP MOUNT B AS	DTQ-29S4FC	
CC102	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC111	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC112	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC113	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC133	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC134	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC151	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC154	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC180	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC205	HCQK820JCA	C CHIP CERA	50V CH 82PF J 2012	
CC206	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC209	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC401	HCQK181JCA	C CHIP CERA	50V CH 180PF J 2012	
CC450	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC500	HCBK392KCA	C CHIP CERA	50V X7R 3900PF K 2012	
CC501	HCQK160JCA	C CHIP CERA	50V CH 16PF J 2012	
CC502	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC507	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
CC528	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
CC570	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC571	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC573	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
CC574	HCQK300JCA	C CHIP CERA	50V CH 30PF J 2012	
CC577	HCQK300JCA	C CHIP CERA	50V CH 30PF J 2012	
CC578	HCQK300JCA	C CHIP CERA	50V CH 30PF J 2012	
CC579	HCQK300JCA	C CHIP CERA	50V CH 30PF J 2012	
CC606	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC610	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC611	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
CC612	HCQK479CCA	C CHIP CERA	50V CH 4.7PF C 2012	
CC613	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC614	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC616	HCQK471JCA	C CHIP CERA	50V CH 470PF J 2012	
CC617	HCQK471JCA	C CHIP CERA	50V CH 470PF J 2012	
CC618	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC619	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC620	HCQK200JCA	C CHIP CERA	50V CH 20PF J 2012	
CC621	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC623	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC624	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC625	HCQK471JCA	C CHIP CERA	50V CH 470PF J 2012	
CC626	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
CC627	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
CC629	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
CC631	HCQK479CCA	C CHIP CERA	50V CH 4.7PF C 2012	
CC633	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC635	HCQK471JCA	C CHIP CERA	50V CH 470PF J 2012	
CC636	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC637	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
CC638	HCBK472KCA	C CHIP CERA	50V X7R 4700PF K 2012	
CC648	HCBK472KCA	C CHIP CERA	50V X7R 4700PF K 2012	
CC690	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC691	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC701	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC708	HCQK120JCA	C CHIP CERA	50V CH 12PF J 2012	
CC720	HCBK102KCA	C CHIP CERA	50V X7R 1000PF K 2012	
CC722	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC741	HCQK221JCA	C CHIP CERA	50V CH 220PF J 2012	
CC752	HCQK180JCA	C CHIP CERA	50V CH 18PF J 2012	
CC754	HCFK104ZCA	C CHIP CERA	50V Y5V 0.1MF Z 2012	
CC755	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC757	HCBK333KCA	C CHIP CERA	50V X7R 0.033MF K 2012	
CC777	HCFK103ZCA	C CHIP CERA	50V Y5V 0.01MF Z 2012	
CC904	HCQK271JCA	C CHIP CERA	50V CH 270PF J 2012	
CC911	HCQK271JCA	C CHIP CERA	50V CH 270PF J 2012	
CC912	HCQK271JCA	C CHIP CERA	50V CH 270PF J 2012	
RC103	HRFT153JCA	R CHIP	1/10 15K OHM J 2012	
RC104	HRFT104JCA	R CHIP	1/10 100K OHM J 2012	
RC105	HRFT153JCA	R CHIP	1/10 15K OHM J 2012	
RC154	HRFT473JCA	R CHIP	1/10 47K OHM J 2012	

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
RC165	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012		RC728	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
RC205	HRFT103JCA	R CHIP	1/10 10K OHM J 2012		RC732	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
RC208	HRFT331JCA	R CHIP	1/10 330 OHM J 2012		RC733	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
RC219	HRFT123JCA	R CHIP	1/10 12K OHM J 2012		RC734	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
RC225	HRFT391JCA	R CHIP	1/10 390 OHM J 2012		RC735	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
RC302	HRFT473JCA	R CHIP	1/10 47K OHM J 2012		RC742	HRFT102JCA	R CHIP	1/10 1K OHM J 2012	
RC303	HRFT562JCA	R CHIP	1/10 5.6K OHM J 2012		RC748	HRFT471JCA	R CHIP	1/10 470 OHM J 2012	
RC306	HRFT623JCA	R CHIP	1/10 62K OHM J 2012		RC756	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012	
RC312	HRFT113JCA	R CHIP	1/10 11K OHM J 2012		RC757	HRFT514JCA	R CHIP	1/10 510K OHM J 2012	
RC412	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		RC758	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012	
RC502	HRFT101JCA	R CHIP	1/10 100 OHM J 2012		RC769	HRFT471JCA	R CHIP	1/10 470 OHM J 2012	
RC504	HRFT101JCA	R CHIP	1/10 100 OHM J 2012		RC902	HRFT471JCA	R CHIP	1/10 470 OHM J 2012	
RC508	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		RC904	HRFT181JCA	R CHIP	1/10 180 OHM J 2012	
RC512	HRFT622JCA	R CHIP	1/10 6.2K OHM J 2012		RC905	HRFT181JCA	R CHIP	1/10 180 OHM J 2012	
RC514	HRFT623JCA	R CHIP	1/10 62K OHM J 2012		RC906	HRFT181JCA	R CHIP	1/10 180 OHM J 2012	
RC525	HRFT152JCA	R CHIP	1/10 1.5K OHM J 2012		RC907	HRFT121JCA	R CHIP	1/10 120 OHM J 2012	
RC526	HRFT122JCA	R CHIP	1/10 1.2K OHM J 2012		RC908	HRFT121JCA	R CHIP	1/10 120 OHM J 2012	
RC530	HRFT561JCA	R CHIP	1/10 560 OHM J 2012		RC909	HRFT121JCA	R CHIP	1/10 120 OHM J 2012	
RC531	HRFT821JCA	R CHIP	1/10 820 OHM J 2012		RC913	HRFT561JCA	R CHIP	1/10 560 OHM J 2012	
RC557	HRFT302JCA	R CHIP	1/10 3K OHM J 2012		RC915	HRFT221JCA	R CHIP	1/10 220 OHM J 2012	
RC559	HRFT331JCA	R CHIP	1/10 330 OHM J 2012		RC921	HRFT471JCA	R CHIP	1/10 470 OHM J 2012	
RC562	HRFT914JCA	R CHIP	1/10 910KOHM J 2012		RC922	HRFT471JCA	R CHIP	1/10 470 OHM J 2012	
RC565	HRFT123JCA	R CHIP	1/10 12K OHM J 2012		ZZ200	PTMPJ0J882	PCB MAIN (RHU) AS	DTQ-29S4FC	
RC567	HRFT103JCA	R CHIP	1/10 10K OHM J 2012		C113	CEXF1C471V	C ELECTRO	16V RSS 470MF (10X12.5)TP	
RC570	HRFT103JCA	R CHIP	1/10 10K OHM J 2012		C212	CEXF1C471V	C ELECTRO	16V RSS 470MF (10X12.5)TP	
RC607	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		C311	CEXF1C471V	C ELECTRO	16V RSS 470MF (10X12.5)TP	
RC617	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		C403	CEXF2C101V	C ELECTRO	160V RSS 100MF (16X25) TP	
RC618	HRFT562JCA	R CHIP	1/10 5.6K OHM J 2012		C404	CEXF2E100V	C ELECTRO	250V RSS 10MF (10X20) TP	
RC627	HRFT562JCA	R CHIP	1/10 5.6K OHM J 2012		C417	CEXF1V471V	C ELECTRO	35V RSS 470MF (10X20) TP	
RC633	HRFT473JCA	R CHIP	1/10 47K OHM J 2012		C419	CEXF1C102V	C ELECTRO	16V RSS 1000MF (10X20) TP	
RC635	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		C424	CEXA2D229E	C ELECTRO	200V RUL 2.2MF (10X16) TP	
RC636	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		C433	CEXF1C471C	C ELECTRO	16V RUS 470MF (10X12.5)TP	
RC637	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		C437	CEXF1E471C	C ELECTRO	25V RUS 470MF (10X16) TP	
RC638	HRFT182JCA	R CHIP	1/10 1.8K OHM J 2012		C605	CEXF1C471V	C ELECTRO	16V RSS 470MF (10X12.5)TP	
RC639	HRFT473JCA	R CHIP	1/10 47K OHM J 2012		C609	CEXF1C471V	C ELECTRO	16V RSS 470MF (10X12.5)TP	
RC640	HRFT473JCA	R CHIP	1/10 47K OHM J 2012		C634	CEXF1E222V	C ELECTRO	25V RSS 2200MF (16X25) TP	
RC641	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		C801	CCXB3D681K	C CERA	2KV B 680PF K (TAPPING)	
RC648	HRFT182JCA	R CHIP	1/10 1.8K OHM J 2012		C810	CBXB3D471K	C CERA SEMI	2KV BL(N) 470PF K (T)	
RC704	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		C816	CEXF2A470V	C ELECTRO	100V RSS 47MF (10X16) TP	
RC705	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		C906	CH1BEE472M	C CERA AC	U/C/V 2.5KV 4700PF TP	
RC710	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012		ZZ200	PTMPJBJ882	PCB MAIN M-10 AS	DTQ-29S4FC	
RC711	HRFT121JCA	R CHIP	1/10 120 OHM J 2012		10	2TM18006BE	TAPE MASKING	6.2X500	
RC712	HRFT471JCA	R CHIP	1/10 470 OHM J 2012		E001	4856310300	EYE LET	BSR T0.2 (R1.6)	
RC713	HRFT101JCA	R CHIP	1/10 100 OHM J 2012		E002	4856310300	EYE LET	BSR T0.2 (R1.6)	
RC716	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012		E003	4856310300	EYE LET	BSR T0.2 (R1.6)	
RC718	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012		E004	4856310300	EYE LET	BSR T0.2 (R1.6)	
RC719	HRFT472JCA	R CHIP	1/10 4.7K OHM J 2012		E005	4856310300	EYE LET	BSR T0.2 (R1.6)	
RC720	HRFT103JCA	R CHIP	1/10 10K OHM J 2012		E006	4856310300	EYE LET	BSR T0.2 (R1.6)	
RC727	HRFT102JCA	R CHIP	1/10 1K OHM J 2012		E007	4856310300	EYE LET	BSR T0.2 (R1.6)	

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
E008	4856310300	EYE LET	BSR T0.2 (R1.6)		E057	4856310300	EYE LET	BSR T0.2 (R1.6)	
E009	4856310600	EYE LET	BSR T0.2 (R2.3)		E058	4856310300	EYE LET	BSR T0.2 (R1.6)	
E010	4856310600	EYE LET	BSR T0.2 (R2.3)		E059	4856310300	EYE LET	BSR T0.2 (R1.6)	
E011	4856310600	EYE LET	BSR T0.2 (R2.3)		E060	4856310300	EYE LET	BSR T0.2 (R1.6)	
E012	4856310600	EYE LET	BSR T0.2 (R2.3)		E061	4856310300	EYE LET	BSR T0.2 (R1.6)	
E013	4856310600	EYE LET	BSR T0.2 (R2.3)		E062	4856310600	EYE LET	BSR T0.2 (R2.3)	
E014	4856310600	EYE LET	BSR T0.2 (R2.3)		E063	4856310600	EYE LET	BSR T0.2 (R2.3)	
E015	4856310300	EYE LET	BSR T0.2 (R1.6)		E064	4856310300	EYE LET	BSR T0.2 (R1.6)	
E016	4856310300	EYE LET	BSR T0.2 (R1.6)		E065	4856310300	EYE LET	BSR T0.2 (R1.6)	
E017	4856310600	EYE LET	BSR T0.2 (R2.3)		E066	4856310300	EYE LET	BSR T0.2 (R1.6)	
E018	4856310600	EYE LET	BSR T0.2 (R2.3)		E067	4856310300	EYE LET	BSR T0.2 (R1.6)	
E019	4856310600	EYE LET	BSR T0.2 (R2.3)		E068	4856310300	EYE LET	BSR T0.2 (R1.6)	
E020	4856310600	EYE LET	BSR T0.2 (R2.3)		E069	4856310300	EYE LET	BSR T0.2 (R1.6)	
E021	4856310600	EYE LET	BSR T0.2 (R2.3)		E070	4856310300	EYE LET	BSR T0.2 (R1.6)	
E022	4856310600	EYE LET	BSR T0.2 (R2.3)		E071	4856310300	EYE LET	BSR T0.2 (R1.6)	
E023	4856310600	EYE LET	BSR T0.2 (R2.3)		E072	4856310600	EYE LET	BSR T0.2 (R2.3)	
E024	4856310300	EYE LET	BSR T0.2 (R1.6)		E073	4856310600	EYE LET	BSR T0.2 (R2.3)	
E025	4856310600	EYE LET	BSR T0.2 (R2.3)		E074	4856310600	EYE LET	BSR T0.2 (R2.3)	
E026	4856310300	EYE LET	BSR T0.2 (R1.6)		E075	4856310600	EYE LET	BSR T0.2 (R2.3)	
E027	4856310300	EYE LET	BSR T0.2 (R1.6)		E076	4856310300	EYE LET	BSR T0.2 (R1.6)	
E028	4856310300	EYE LET	BSR T0.2 (R1.6)		E077	4856310300	EYE LET	BSR T0.2 (R1.6)	
E029	4856310300	EYE LET	BSR T0.2 (R1.6)		E078	4856310300	EYE LET	BSR T0.2 (R1.6)	
E030	4856310600	EYE LET	BSR T0.2 (R2.3)		N005	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)	
E031	4856310600	EYE LET	BSR T0.2 (R2.3)		N006	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)	
E032	4856310300	EYE LET	BSR T0.2 (R1.6)		N007	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)	
E033	4856310600	EYE LET	BSR T0.2 (R2.3)		N008	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)	
E034	4856310600	EYE LET	BSR T0.2 (R2.3)		N009	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)	
E035	4856310600	EYE LET	BSR T0.2 (R2.3)		N010	4857417500	TERM PIN	DA-IB0214(D2.3/DY PIN)	
E036	4856310600	EYE LET	BSR T0.2 (R2.3)		P601	485923172S	CONN WAFER	YW025-04 (STICK)	
E037	4856310300	EYE LET	BSR T0.2 (R1.6)		R204	RS02Z471JS	R M-OXIDE FILM	2W 470 OHM J SMALL	
E038	4856310600	EYE LET	BSR T0.2 (R2.3)		R305	RS01Z109J-	R M-OXIDE FILM	1W 1 OHM J (TAPPING)	
E039	4856310600	EYE LET	BSR T0.2 (R2.3)		R411	RS02Z100JS	R M-OXIDE FILM	2W 10 OHM J SMALL	
E040	4856310300	EYE LET	BSR T0.2 (R1.6)		R415	RS02Z102JS	R M-OXIDE FILM	2W 1K OHM J SMALL	
E041	4856310300	EYE LET	BSR T0.2 (R1.6)		R417	RS02Z470JS	R M-OXIDE FILM	2W 47 OHM J SMALL	
E042	4856310300	EYE LET	BSR T0.2 (R1.6)		R418	RS01Z229J-	R M-OXIDE FILM	1W 2.2 OHM J (TAPPING)	
E043	4856310300	EYE LET	BSR T0.2 (R1.6)		R419	RF02Z159J-	R FUSIBLE	2W 1.5 OHM J (TAPPING)	
E044	4856310600	EYE LET	BSR T0.2 (R2.3)		R420	RS02Z333JS	R M-OXIDE FILM	2W 33K OHM J SMALL	
E045	4856310600	EYE LET	BSR T0.2 (R2.3)		R425	RS02Z153JS	R M-OXIDE FILM	2W 15K OHM J SMALL	
E046	4856310300	EYE LET	BSR T0.2 (R1.6)		R430	RS02Z100JS	R M-OXIDE FILM	2W 10 OHM J SMALL	
E047	4856310600	EYE LET	BSR T0.2 (R2.3)		R451	RS02Z271JS	R M-OXIDE FILM	2W 270 OHM J SMALL	
E048	4856310300	EYE LET	BSR T0.2 (R1.6)		R601	RS02Z910JS	R M-OXIDE FILM	2W 91 OHM J SMALL	
E049	4856310300	EYE LET	BSR T0.2 (R1.6)		R602	RS01Z121J-	R M-OXIDE FILM	1W 120 OHM J (TAPPING)	
E050	4856310300	EYE LET	BSR T0.2 (R1.6)		R810	RF01Z398K-	R FUSIBLE	1W 0.39 OHM K (TAPPING)	
E051	4856310300	EYE LET	BSR T0.2 (R1.6)		R823	RS02Z273JS	R M-OXIDE FILM	2W 27K OHM J SMALL	
E052	4856310300	EYE LET	BSR T0.2 (R1.6)		R824	RS01Z228J-	R M-OXIDE FILM	1W 0.22 OHM J	
E053	4856310300	EYE LET	BSR T0.2 (R1.6)		R825	RF02Z128J-	R FUSIBLE	2W 0.12 OHM J (TAPPING)	
E054	4856310300	EYE LET	BSR T0.2 (R1.6)		R826	RS02Z109JS	R M-OXIDE FILM	2W 1 OHM J SMALL	
E055	4856310600	EYE LET	BSR T0.2 (R2.3)		R828	RS02Z100JS	R M-OXIDE FILM	2W 10 OHM J SMALL	
E056	4856310300	EYE LET	BSR T0.2 (R1.6)		R916	RS01Z339J-	R M-OXIDE FILM	1W 3.3 OHM J (TAPPING)	

SERVISE PARTS LIST

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
R921	RS02Z243JS	R M-OXIDE FILM	2W 24K OHM J SMALL		C602	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
R922	RS02Z243JS	R M-OXIDE FILM	2W 24K OHM J SMALL		C603	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP	
R923	RS02Z243JS	R M-OXIDE FILM	2W 24K OHM J SMALL		C607	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
R924	RS02Z243JS	R M-OXIDE FILM	2W 24K OHM J SMALL		C608	CEXF1C470V	C ELECTRO	16V RSS 47MF (5X11) TP	
R925	RS02Z243JS	R M-OXIDE FILM	2W 24K OHM J SMALL		C611	CEXF1C470V	C ELECTRO	16V RSS 47MF (5X11) TP	
R926	RS02Z243JS	R M-OXIDE FILM	2W 24K OHM J SMALL		C612	CEXF1H339V	C ELECTRO	50V RSS 3.3MF (5X11) TP	
ZZ200	PTMPJRJ882	PCB MAIN RADIAL AS	DTQ-29S4FC		C613	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP	
C106	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP		C615	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
C107	CEXF1H228V	C ELECTRO	50V RSS 0.22MF (5X11) TP		C616	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
C108	CEXF1H101V	C ELECTRO	50V RSS 100MF (8X11.5) TP		C618	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
C109	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP		C619	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
C114	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP		C621	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP	
C116	CMXM2A333J	C MYLAR	100V 0.033MF J (TP)		C623	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP	
C117	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)		C624	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP	
C201	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP		C625	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP	
C204	CEXF1H478V	C ELECTRO	50V RSS 0.47MF (5X11) TP		C626	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP	
C210	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP		C631	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP	
C213	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP		C635	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP	
C214	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP		C701	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP	
C301	CXSL2H100D	C CERA	500V SL 10PF D (TAPPING)		C703	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
C303	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		C704	CEXF1H229V	C ELECTRO	50V RSS 2.2MF (5X11) TP	
C304	CMXM2A224J	C MYLAR	100V 0.22MF J		C705	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP	
C305	CEXF1H101V	C ELECTRO	50V RSS 100MF (8X11.5) TP		C709	CEXF1C221V	C ELECTRO	16V RSS 220MF (8X11.5) TP	
C306	CEXD1H109Q	C ELECTRO	50V RT 1MF (6.3X11) TP		C805	CCXB2H222K	C CERA	500V B 2200PF K (TAPPING)	
C308	CMXM2A153J	C MYLAR	100V 0.015MF J (TP)		C806	CCXB2H222K	C CERA	500V B 2200PF K (TAPPING)	
C309	CMXM2A473J	C MYLAR	100V 0.047MF J (TP)		C807	CCXB1H821K	C CERA	50V B 820PF K (TAPPING)	
C310	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)		C808	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
C312	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		C812	CCXB3A471K	C CERA	1KV B 470PF K (T)	
C401	CCXB2H102K	C CERA	500V B 1000PF K (TAPPING)		C814	CCXB2H101K	C CERA	500V B 100PF K (TAPPING)	
C405	CEXF2C109V	C ELECTRO	160V RSS 1MF (6.3X11) TP		C815	CCXB3A471K	C CERA	1KV B 470PF K (T)	
C418	CCXB2H102K	C CERA	500V B 1000PF K (TAPPING)		C818	CMXM2A224J	C MYLAR	100V 0.22MF J	
C421	CEXF1H470V	C ELECTRO	50V RSS 47MF (6.3X11) TP		C819	CCXB3A471K	C CERA	1KV B 470PF K (T)	
C425	CEXF1E470V	C ELECTRO	25V RSS 47MF (5X11) TP		C822	CEXF1C101V	C ELECTRO	16V RSS 100MF (6.3X11) TP	
C429	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)		C829	CEXF1H470C	C ELECTRO	50V RUS 47MF (6.3X11) TP	
C501	CMXL1J105J	C MYLAR	63V MEU 1MF J		C830	CCXB1H152K	C CERA	50V B 1500PF K (TAPPING)	
C502	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP		C832	CEXF1H220V	C ELECTRO	50V RSS 22MF (5X11) TP	
C503	CEXF1C221V	C ELECTRO	16V RSS 220MF (8X11.5) TP		C833	CEXF1H479V	C ELECTRO	50V RSS 4.7MF (5X11) TP	
C504	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		C834	CMXM2A104J	C MYLAR	100V 0.1MF J (TP)	
C505	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		C862	CEXF1E101V	C ELECTRO	25V RSS 100MF (6.3X11) TP	
C506	CEXF1H100V	C ELECTRO	50V RSS 10MF (5X11) TP		F801A	4857415001	CLIP FUSE	PFC5000-0702	
C507	CMXM2A224J	C MYLAR	100V 0.22MF J		F801B	4857415001	CLIP FUSE	PFC5000-0702	
C508	CMXM2A224J	C MYLAR	100V 0.22MF J		L805	58CX430599	COIL CHOKE	AZ-9004Y 940K TP	
C509	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP		L806	58CX430599	COIL CHOKE	AZ-9004Y 940K TP	
C511	CMXM2A153J	C MYLAR	100V 0.015MF J (TP)		L901	5CPX181J—	COIL PEAKING	180UH J (RADIAL)	
C512	CEXF1H108V	C ELECTRO	50V RSS 0.1MF (5X11) TP		Q203	TKTA1266Y-	TR	KTA1266Y (TP)	
C513	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP		Q407	TKTC3198Y-	TR	KTC3198Y	
C517	CMXM2A103J	C MYLAR	100V 0.01MF J (TP)		Q601	TKTC3198Y-	TR	KTC3198Y	
C518	CEXF1H478V	C ELECTRO	50V RSS 0.47MF (5X11) TP		Q703	TKTC3203Y-	TR	KTC3203-Y	
C570	CEXF1H109V	C ELECTRO	50V RSS 1MF (5X11) TP		Q704	TKTA1266Y-	TR	KTA1266Y (TP)	

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
Q706	TKTC3198Y-	TR	KTC3198Y	
Q802	TKTC3198Y-	TR	KTC3198Y	
Q803	TKTC3198Y-	TR	KTC3198Y	
Q806	TKTC3198Y-	TR	KTC3198Y	
Q904	TKTC3198Y-	TR	KTC3198Y	
Q905	TKTC3198Y-	TR	KTC3198Y	
Q906	TKTC3198Y-	TR	KTC3198Y	
Q907	TKTA1266Y-	TR	KTA1266Y (TP)	
R102	RN02B910JS	R METAL FILM	2W 91 OHM J SMALL	
R104	RN02B472JS	R METAL FILM	2W 4.7K OHM J SMALL	
R304	RN01B109JS	R METAL FILM	1W 1 OHM J SMALL	
R308	RN02B471JS	R METAL FILM	2W 470 OHM J SMALL	
R309	RN02B271JS	R METAL FILM	2W 270 OHM J SMALL	
R315	RN02B620JS	R METAL FILM	2W 62 OHM J SMALL	
R401	RN02B680JS	R METAL FILM	2W 68 OHM J SMALL	
R402	RN02B680JS	R METAL FILM	2W 68 OHM J SMALL	
R450	RN02B151JS	R METAL FILM	2W 150 OHM J SMALL	
SW701	5S50101090	SW TACT	THVH472GCA	
SW702	5S50101090	SW TACT	THVH472GCA	
SW703	5S50101090	SW TACT	THVH472GCA	
SW704	5S50101090	SW TACT	THVH472GCA	
SW705	5S50101090	SW TACT	THVH472GCA	
SW706	5S50101090	SW TACT	THVH472GCA	
X501	5XEX3R579C	CRYSTAL QUARTZ	HC-49U 3.579545M (TP)	
ZZ200	PTMPJAJ882	PCB MAIN AXIAL AS	DTQ-29S4FC	
10	2TM14006LB	TAPE MASKING	3M #232 6.0X2000M	
20	2TM10006LB	TAPE MASKING	3M #232-MAP-C 6.2X2000M	
A001	4859813891	PCB MAIN	330X246 S1B	
C314	CZCH1H200J	C CERA	50V CH 20PF J (AXIAL)	
C628	CZSL1H470J	C CERA	50V SL 47PF J (AXIAL)	
C638	CCZB1H102K	C CERA	50V B 1000PF K (AXIAL)	
C716	CCZF1H103Z	C CERA	50V F 0.01MF Z	
C825	CBZF1H104Z	C CERA SEMI	50V F 0.1MF Z	
D101	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
D102	DUZ33B——	DIODE ZENER	UZ-33B	
D207	DUZ9R1BM—	DIODE ZENER	UZ-9.1BM	
D208	DUZ9R1BM—	DIODE ZENER	UZ-9.1BM	
D301	D1N4004S—	DIODE	1N4004S	
D401	DUZ9R1BM—	DIODE ZENER	UZ-9.1BM	
D404	D1N4148—-	DIODE	1N4148 (TAPPING)	
D406	DRGP15J—-	DIODE	RGP15J	
D407	D1N4937G—	DIODE	1N4937G (TAPPING)	
D408	D1N4937G—	DIODE	1N4937G (TAPPING)	
D410	D1N4937G—	DIODE	1N4937G (TAPPING)	
D411	D1N4937G—	DIODE	1N4937G (TAPPING)	
D415	DUZ9R1BM—	DIODE ZENER	UZ-9.1BM	
D502	D1N4148—-	DIODE	1N4148 (TAPPING)	
D504	D1N4148—-	DIODE	1N4148 (TAPPING)	
D601	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
D605	DUZ8R2BM—	DIODE ZENER	UZ-8.2BM	
D622	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
D623	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
D705	D1N4148—-	DIODE	1N4148 (TAPPING)	
D706	DUZ3R9B—-	DIODE ZENER	UZ-3.9B	
D719	D1N4148—-	DIODE	1N4148 (TAPPING)	
D721	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
D723	DMTZJ5R6B-	DIODE ZENER	MTZJ 5.6B	
D803	D1N4937G—	DIODE	1N4937G (TAPPING)	
D804	D1N4937G—	DIODE	1N4937G (TAPPING)	
D805	D1N4937G—	DIODE	1N4937G (TAPPING)	
D807	D1N4937G—	DIODE	1N4937G (TAPPING)	
D812	D1N4937G—	DIODE	1N4937G (TAPPING)	
D814	D1N4937G—	DIODE	1N4937G (TAPPING)	
D815	D1N4937G—	DIODE	1N4937G (TAPPING)	
D819	D1N4937G—	DIODE	1N4937G (TAPPING)	
J001	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J002	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J004	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J005	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J006	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J007	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J008	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J010	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J011	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J012	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J013	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J014	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J015	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J016	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J017	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J018	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J019	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J020	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J021	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J022	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J023	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J025	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J026	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J027	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J030	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J031	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J032	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J033	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J034	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J035	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J036	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J037	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J038	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	

LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK	LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
J039	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J089	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J040	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J090	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J041	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J091	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J042	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J092	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J043	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J094	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J044	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J095	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J045	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J096	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J046	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J097	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J048	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J099	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J049	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J101	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J050	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J102	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J051	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J104	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J052	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J105	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J053	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J106	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J054	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J108	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J055	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J109	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J056	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J111	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J057	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J112	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J058	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J113	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J059	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J114	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J060	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J115	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J061	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J116	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J062	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J117	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J063	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J118	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J064	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J119	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J065	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J120	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J066	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J122	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J067	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J123	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J068	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J124	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J069	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J125	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J070	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		J126	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING	
J071	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L101	5CPZ330K02	COIL PEAKING	33UH K (AXIAL 3.5MM)	
J072	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L111	5CPZ568M02	COIL PEAKING	0.56UH M (AXIAL 3.5MM)	
J073	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L203	5CPZ100K04	COIL PEAKING	10UH 10.5MM K (LAL04TB)	
J074	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L401	58C0000026	COIL BEAD	HC-4035	
J075	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L533	5CPZ150K02	COIL PEAKING	15UH K (AXIAL 3.5MM)	
J076	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L601	5CPZ560K02	COIL PEAKING	56UH K (AXIAL 3.5MM)	
J077	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L602	5CPZ150K02	COIL PEAKING	15UH K (AXIAL 3.5MM)	
J078	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L603	5CPZ560K04	COIL PEAKING	56UH K (AXIAL 10.5MM)	
J079	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L701	5CPZ100K02	COIL PEAKING	10UH K (AXIAL 3.5MM)	
J080	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L802	5MC0000100	COIL BEAD	HC-3550	
J081	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L804	5MC0000100	COIL BEAD	HC-3550	
J082	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L807	5MC0000100	COIL BEAD	HC-3550	
J083	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		L808	5MC0000100	COIL BEAD	HC-3550	
J084	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R106	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
J085	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R107	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
J086	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R202	RD-AZ753J-	R CARBON FILM	1/6 75K OHM J	
J087	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R203	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
J088	85801065GY	WIRE COPPER	AWG22 1/0.65 TIN COATING		R205	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J	

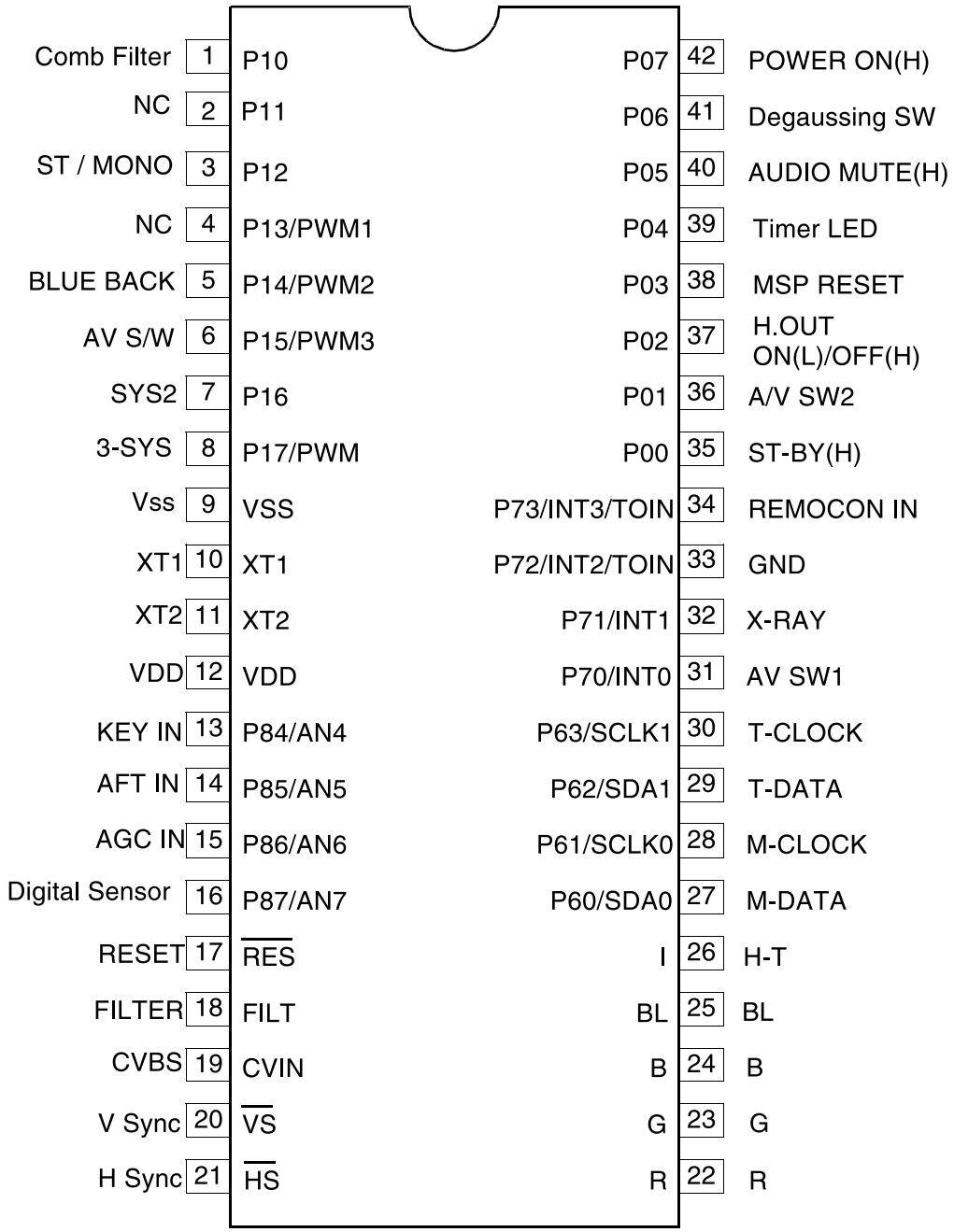
LOC	PART CODE	PART NAME	PART DESCRIPTION	REMARK
R207	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J	
R212	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R214	RD-AZ750J-	R CARBON FILM	1/6 75 OHM J	
R228	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J	
R229	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J	
R230	RD-AZ331J-	R CARBON FILM	1/6 330 OHM J	
R301	RD-4Z752J-	R CARBON FILM	1/4 7.5K OHM J	
R303	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R306	RD-4Z124J-	R CARBON FILM	1/4 120K OHM J	
R307	RD-4Z153J-	R CARBON FILM	1/4 15K OHM J	
R310	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R311	RD-AZ363J-	R CARBON FILM	1/6 36K OHM J	
R312	RD-AZ133J-	R CARBON FILM	1/6 13K OHM J	
R313	RD-AZ913J-	R CARBON FILM	1/6 91K OHM J	
R406	RD-4Z203J-	R CARBON FILM	1/4 20K OHM J	
R410	RD-2Z103J-	R CARBON FILM	1/2 10K OHM J	
R413	RD-4Z822J-	R CARBON FILM	1/4 8.2K OHM J	
R421	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R423	RD-2Z470J-	R CARBON FILM	1/2 47 OHM J	
R424	RD-4Z123J-	R CARBON FILM	1/4 12K OHM J	
R432	RD-4Z220J-	R CARBON FILM	1/4 22 OHM J	
R443	RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J	
R500	RD-AZ514J-	R CARBON FILM	1/6 510K OHM J	
R501	RD-4Z271J-	R CARBON FILM	1/4 270 OHM J	
R502	RD-2Z151J-	R CARBON FILM	1/2 150 OHM J	
R504	RD-AZ752J-	R CARBON FILM	1/6 7.5K OHM J	
R508	RD-AZ154J-	R CARBON FILM	1/6 150K OHM J	
R512	RD-AZ241J-	R CARBON FILM	1/6 240 OHM J	
R554	RD-4Z102J-	R CARBON FILM	1/4 1K OHM J	
R568	RN-4Z4701F	R METAL FILM	1/4 4.70K OHM F	
R603	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J	
R611	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R613	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R615	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R634	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R635	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R636	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J	
R701	RD-AZ240J-	R CARBON FILM	1/6 24 OHM J	
R704	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R707	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R717	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R718	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R719	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R721	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
R722	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R724	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R725	RD-AZ512J-	R CARBON FILM	1/6 5.1K OHM J	
R726	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R730	RD-AZ101J-	R CARBON FILM	1/6 100 OHM J	
R736	RD-AZ362J-	R CARBON FILM	1/6 3.6K OHM J	
R737	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J	
R738	RD-AZ362J-	R CARBON FILM	1/6 3.6K OHM J	
R739	RD-AZ272J-	R CARBON FILM	1/6 2.7K OHM J	
R749	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R750	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R751	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R752	RD-AZ152J-	R CARBON FILM	1/6 1.5K OHM J	
R753	RD-AZ222J-	R CARBON FILM	1/6 2.2K OHM J	
R754	RD-AZ392J-	R CARBON FILM	1/6 3.9K OHM J	
R767	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R770	RD-4Z101J-	R CARBON FILM	1/4 100 OHM J	
R780	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R782	RD-AZ102J-	R CARBON FILM	1/6 1K OHM J	
R790	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R798	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J	
R799	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R803	RD-AZ911J-	R CARBON FILM	1/6 910 OHM J	
R805	RD-4Z242J-	R CARBON FILM	1/4 2.4K OHM J	
R806	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R808	RD-4Z102J-	R CARBON FILM	1/4 1K OHM J	
R809	RD-4Z102J-	R CARBON FILM	1/4 1K OHM J	
R811	RD-4Z363J-	R CARBON FILM	1/4 36K OHM J	
R812	RD-AZ223J-	R CARBON FILM	1/6 22K OHM J	
R813	RD-AZ563J-	R CARBON FILM	1/6 56K OHM J	
R818	RD-4Z102J-	R CARBON FILM	1/4 1K OHM J	
R819	RD-AZ822J-	R CARBON FILM	1/6 8.2K OHM J	
R827	RD-AZ473J-	R CARBON FILM	1/6 47K OHM J	
R829	RD-4Z123J-	R CARBON FILM	1/4 12K OHM J	
R830	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R833	RD-AZ103J-	R CARBON FILM	1/6 10K OHM J	
R834	RD-4Z109J-	R CARBON FILM	1/4 1 OHM J	
R835	RC-2Z565KP	R CARBON COMP	1/2 5.6M OHM K	
R888	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R901	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
R903	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
R910	RD-AZ471J-	R CARBON FILM	1/6 470 OHM J	
R914	RD-AZ472J-	R CARBON FILM	1/6 4.7K OHM J	
R918	RD-2Z102J-	R CARBON FILM	1/2 1K OHM J	
R919	RD-2Z102J-	R CARBON FILM	1/2 1K OHM J	
R920	RD-2Z102J-	R CARBON FILM	1/2 1K OHM J	

1. DIFFERENT RARTS LIST

LOC	PART CODE	PART NAEM	DESCRIPTION	29S4FC	29S4SC	29S4SS
00030	4850Q00810	BATTERY	R6P/LN	0	1	1
M191	4851943200	BUTTON CTRL	4949300+5544000	1	0	0
M191	4851943203	BUTTON CTRL	4949303+5544000	0	1	0
M191	4851943202	BUTTON CTRL	4943202+5544000	0	0	1
M201	4852077600	MASK FRONT	FR HIPS GY(782A)	1	0	0
M201	4852077602	MASK FRONT	FR HIPS GY 29S4	0	1	0
M201	4852077601	MASK FRONT	HIPS GY	0	0	1
ZZ110	PTACPWJ882	ACCESSORY AS	DTQ-29S4FC	1	0	0
ZZ110	PTACPWJ942	ACCESSORY AS	DTQ-29S4SC	0	1	0
ZZ110	PTACPWJ931	ACCESSORY AS	DTQ-29S4SS	0	0	1
ZZ140	PTCACAJ882	CABINET AS	DTQ-29S4FC	1	0	0
ZZ140	PTCACAJ942	CABINET AS	DTQ-29S4SC	0	1	0
ZZ140	PTCACAJ931	CABINET AS	DTQ-29S4SS	0	0	1
ZZ200	PTFMSJJ882	MASK FRONT AS	DTQ-29S4FC	1	0	0
ZZ200	PTFMSJJ942	MASK FRONT AS	DTQ-29S4SC	0	1	0
M211	4852159400	COVER BACK	FR HIPS BK	1	1	0
M211	4852159401	COVER BACK	HIPS GY	0	0	1
PWC1	4859907810	CORD POWER AS	ME301P+TER=2100	1	1	0
PWC1	4859902710	CORD POWER AS	KJ-10+SPT-2+YPT018=2100	0	0	1
V901	4859633760	CRT	A68KTB359X001(B) P50	1	1	0
V901	4859633763	CRT	A68KTB359X001(B) P23	0	0	1
ZZ120	PTBCSHJ882	COVER BACK AS	DTQ-29S4FC	1	1	0
ZZ120	PTBCSHJ931	COVER BACK AS	DTQ-29S4SS	0	0	1
ZZ200	PTMPJBJ882	PCB MAIN M-10 AS	DTQ-29S4FC	1	1	0
ZZ200	PTMPJ0J882	PCB MAIN (RHU) AS	DTQ-29S4FC	1	1	0
ZZ200	PTMPJRJ882	PCB MAIN RADIAL AS	DTQ-29S4FC	1	1	0
ZZ200	PTMPJAJ882	PCB MAIN AXIAL AS	DTQ-29S4FC	1	1	0
ZZ200	PTMPJ2J882	PCB CHIP MOUNT B AS	DTQ-29S4FC	1	1	0
ZZ200	PTFMSJJ931	MASK FRONT AS	DTQ-29S4SS	0	0	1
ZZ200	PTMPJBJ931	PCB MAIN M-10 AS	DTQ-29S4SS	0	0	1
ZZ200	PTMPJ0J931	PCB MAIN (RHU) AS	DTQ-29S4SS	0	0	1
ZZ200	PTMPJRJ931	PCB MAIN RADIAL AS	DTQ-29S4SS	0	0	1
ZZ200	PTMPJAJ931	PCB MAIN AXIAL AS	DTQ-29S4SS	0	0	1
ZZ200	PTMPJ2J931	PCB CHIP MOUNT B AS	DTQ-29S4SS	0	0	1
ZZ290	PTMPMSJ882	PCB MAIN MANUAL AS	DTQ-29S4FC	1	1	0
ZZ290	PTMPMSJ931	PCB MAIN MANUAL AS	DTQ-29S4SS	0	0	1

U-COM(I701)

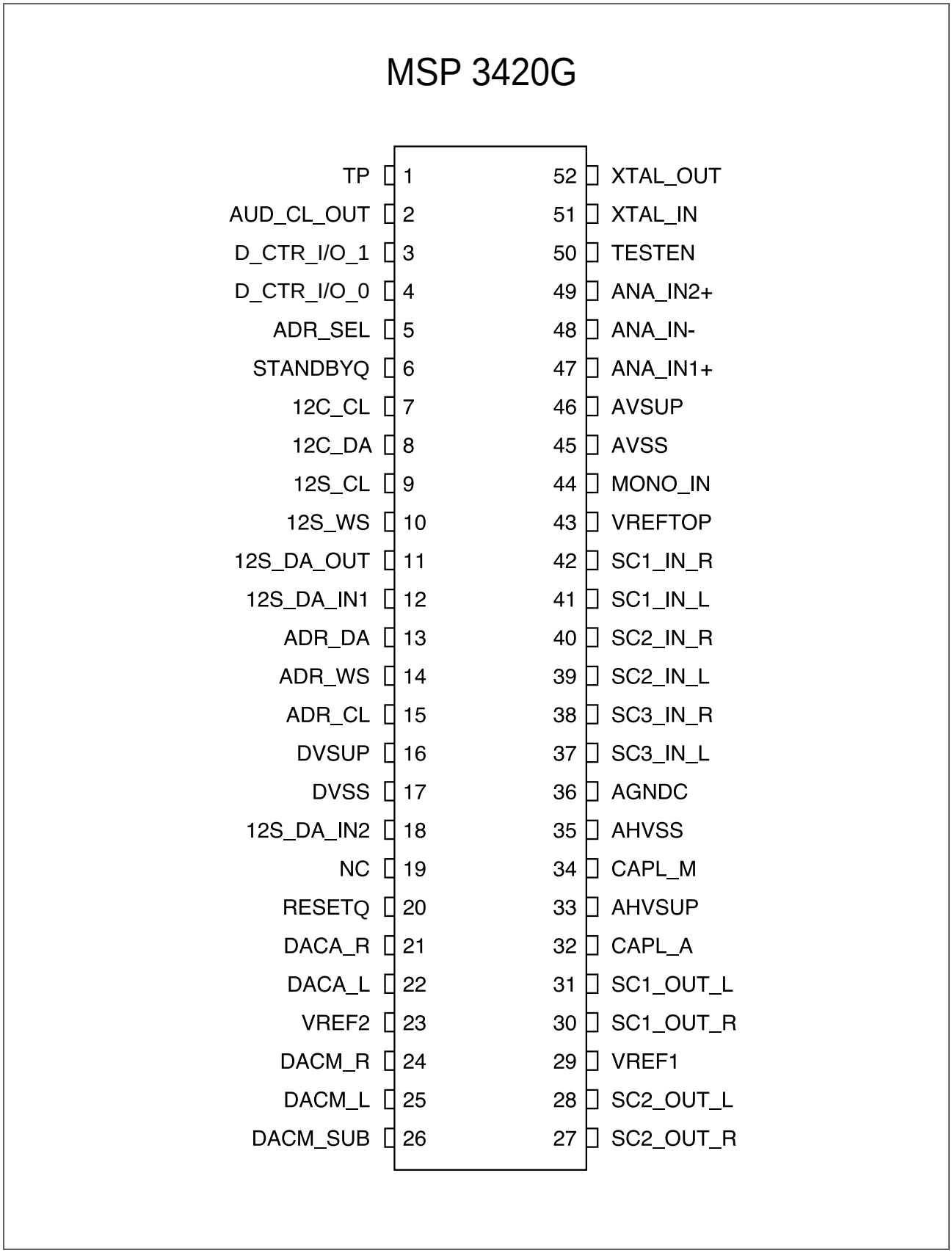
DW863240V-LA1



- X'TAL : 32.768 KHz

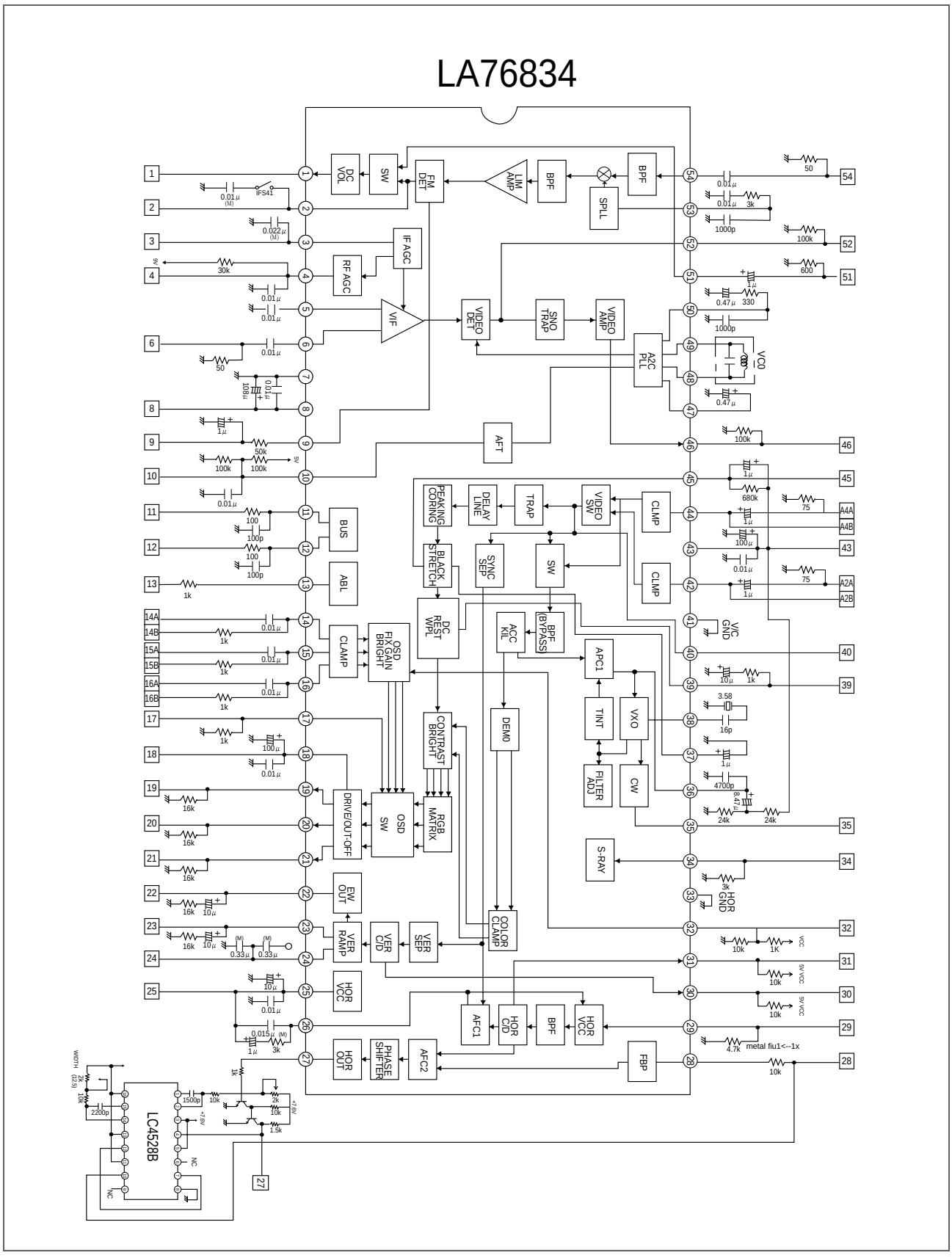
NO	PIN	PIN NAME	DESCRIPTION (LEVEL)
1	1	Comb Filter	+5V
2	2	NC	NC
3	3	ST/MONO	+5V
4	4	NC	I503#6
5	5	BLUE BACK	+5V
6	6	AV S/W	+5V
7	7	SYS2	NC
8	8	3-SYS	GND
9	9	Vss	GND
10	10	XT1	32.768KHz
11	11	XT2	32.768KHz
12	12	Vdd	+5V
13	13	KEY IN	SW702~6
14	14	AFT IN	I101#10
15	15	AGC IN	TU01,I101#4
16	16	DIGITAL SENSOR	IF02
17	17	RESET	RESET ACTIVE “L”
18	18	FILTER	FILTER
19	19	CVBS	I501#12
20	20	VS	I101#30
21	21	HS	I101#31
22	22	R	I101#14
23	23	G	I101#15
24	24	B	I101#16
25	25	BL	I101#17
26	26	H-T	NC
27	27	MSP-DATA	IS601#8
28	28	MSP-CLOCK	IS601#7
29	29	T-DATA	TU01,I101#11
30	30	T-CLOCK	TU01,I101#12
31	31	AV S/W1	I503 #6
32	32	X-RAY	GND
33	33	GND	GND
34	34	REMOCON IN	IF01
35	35	STAND-BY	NC
36	36	AV S/W2	I503 #8
37	37	H-OUT	Q407 BASE (TO 2SD2578)
38	38	MSP-RESET	IS601#20 ACTIVE “L”
39	39	TIMER LED	STD-BY: "H", TV ON: "L"
40	40	AUDIO MUTE	I602#10
41	41	Degaussing sw	Q703 BASE (TO RELAY) Degaussing : “H”
42	42	PWR ON	Q806 BASE(TO STR-F6656) TV ON : “H”

MSP(I601)


MSP 3420G
TP 1
AUD_CL_OUT 2
D_CTR_I/O_1 3
D_CTR_I/O_0 4
ADR_SEL 5
STANDBYQ 6
12C_CL 7
12C_DA 8
12S_CL 9
12S_WS 10
12S_DA_OUT 11
12S_DA_IN1 12
ADR_DA 13
ADR_WS 14
ADR_CL 15
DVSUP 16
DVSS 17
12S_DA_IN2 18
NC 19
RESETQ 20
DACA_R 21
DACA_L 22
VREF2 23
DACM_R 24
DACM_L 25
DACM_SUB 26
52 XTAL_OUT
51 XTAL_IN
50 TESTEN
49 ANA_IN2+
48 ANA_IN-
47 ANA_IN1+
46 AVSUP
45 AVSS
44 MONO_IN
43 VREFTOP
42 SC1_IN_R
41 SC1_IN_L
40 SC2_IN_R
39 SC2_IN_L
38 SC3_IN_R
37 SC3_IN_L
36 AGNDC
35 AHVSS
34 CAPL_M
33 AHVSUP
32 CAPL_A
31 SC1_OUT_L
30 SC1_OUT_R
29 VREF1
28 SC2_OUT_L
27 SC2_OUT_R

PIN NOMBER (PSDIP52-PIN)	PIN NAME	TYPE	CONNECTION (IF NOT USED)	SHORT DESCRIPTION
1	TP		LV	TEST PIN
2	AUD-CL-OUT	OUT	LV	AUDIO CLOCK OUTPUT (18.432MHz)
3	D_CTR_I/O_1	IN/OUT	LV	D_CTR_I/O_1
4	D_CTR_I/O_0	IN/OUT	LV	D_CTR_I/O_0
5	ADR_SEL	IN	X	I²C Bus address select
6	STANDBYQ	IN	X	Stand-by (low-active)
7	I2C_CL	IN/OUT	X	I²C clock
8	I2C_DA	IN/OUT	X	I²C DATA
9	12S_CL	IN/OUT	LV	I²C clock
10	12S_WS	IN/OUT	LV	I²S word strobe
11	12S_DA_OUT	OUT	LV	I²S data output
12	12S_DA_IN1	IN	LV	I²S1 data input
13	ADR_DA	OUT	LV	ADR data output
14	ADR_WS	OUT	LV	ADR word strobe
15	ADR_CL	OUT	LV	ADR clock
16	DVSUP		X	Digital power supply 5V
17	DVSS		X	Digital ground
18	I2S_DA_IN2	IN	LV	I²S2-data input
19	NC		LV	Not connected
20	RESETQ	IN	X	Power-on-reset
21	DACA_R	OUT	LV	Headphone out, right
22	DACA_L	OUT	LV	Headphone out, left
23	VREF2		X	Reference ground 2
24	DACM_R	OUT	LV	Loudspeaker out, right
25	DACM_L	OUT	LV	Loudspeaker out, left
26	DACM-SUB	OUT	LV	Subwoofer output
27	SC2_OUT_R	OUT	LV	SCART output2, right
28	SC2_OUT_L	OUT	LV	SCART output2, left
29	VREF1		X	Reference ground 1
30	SC1_OUT_R	OUT	LV	SCART output1, right
31	SC1_OUT_L	OUT	LV	SCART output1, left
32	CAPL_A		X	Volume capacitor AUX
33	AHVSUP		X	Analog power supply 8V
34	CAPL_M		X	Volume capacitor MAIN
35	AHVSS		X	Analog ground
36	AGNDC		X	Analog reference voltage
37	SC3_IN_L	IN	LV	SCART 3 input, left
38	SC3_IN_R	IN	LV	SCART 3 input, right
39	SC2_IN_L	IN	LV	SCART 2 input, left
40	SC2_IN_R	IN	LV	SCART 2 input, right
41	SC1_IN_L	IN	LV	SCART 1 input, left
42	SC1_IN_R	IN	LV	SCART 1 input, right
43	VREFTOP		X	Refrence voltage IF A/D converter
44	MONO_IN	IN	LV	Mono input
45	AVSS		X	Analog ground
46	AVSUP		X	Analog power supply 5V
47	ANA_IN1+	IN	LV	IF input 1
48	ANA_IN-	IN	AVSS via 56pF/LV	IF common(can be left vacant, only if IF input 1 is also not in use)
49	ANA_IN_2+	IN	AVSS via 56pF/LV	IF input 2(can be left vacant, only it IF input 1 is also not in use)
50	TESTEN	IN	X	TEST PIN
51	XTAL_IN	IN	X	Crystal oscillator
52	XTAL_OUTA	OUT	X	Crystal oscillator

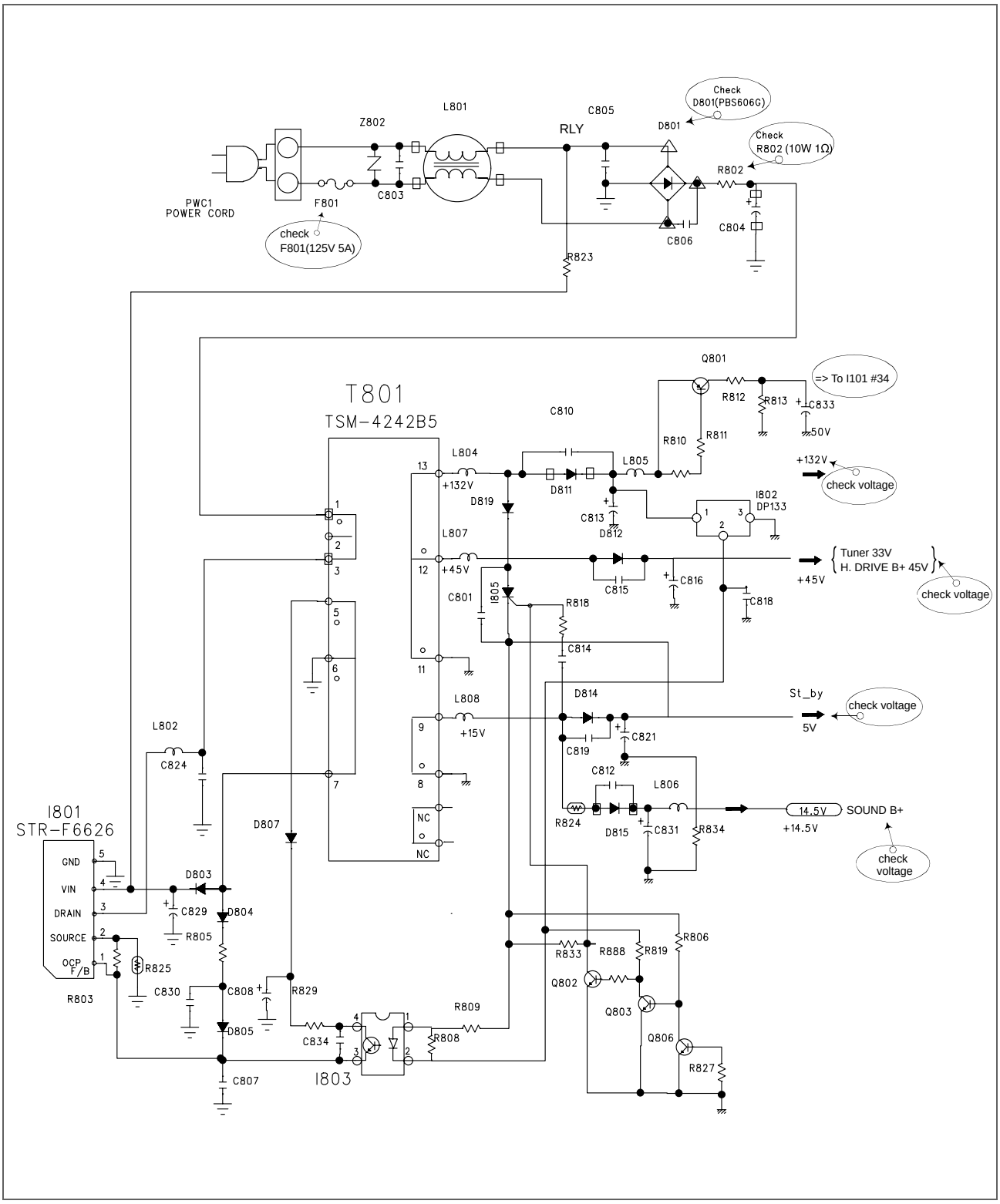
Main IC(I101)


LA76834
DC VOL
SW
FM DET
LIM AMP
BPF
SPLL
IF AGC
RF AGC
VIF
VIDEO DET
SNO TRAP
VIDEO AMP
A2C PLL
VCO
AFT
PEAKING CORING
DELAY LINE
TRAP
VIDEO SW
CLMP
BLACK STRETCH
SYNC SEP
BUS
ABL
CLAMP
OSD FIX GAIN BRIGHT
DC REST WPL
ACC KIL
APC1
TINT
VXO
FILTER ADJ
CW
S-RAY
CONTRAST BRIGHT
DEM0
RGB MATRIX
OSD SW
DRIVE/OUT-OFF
EW OUT
VER RAMP
VER C/D
VER SEP
COLOR CLAMP
HOR VCC
HOR C/D
HOR OUT
PHASE SHIFTER
AFC1
AFC2
FBP
VIC GND
HOR GND
A4A
A4B
A2A
A2B
metal fiu1<--1x
LC4528B
WIDTH
NC

LA76834 Pin Assignment

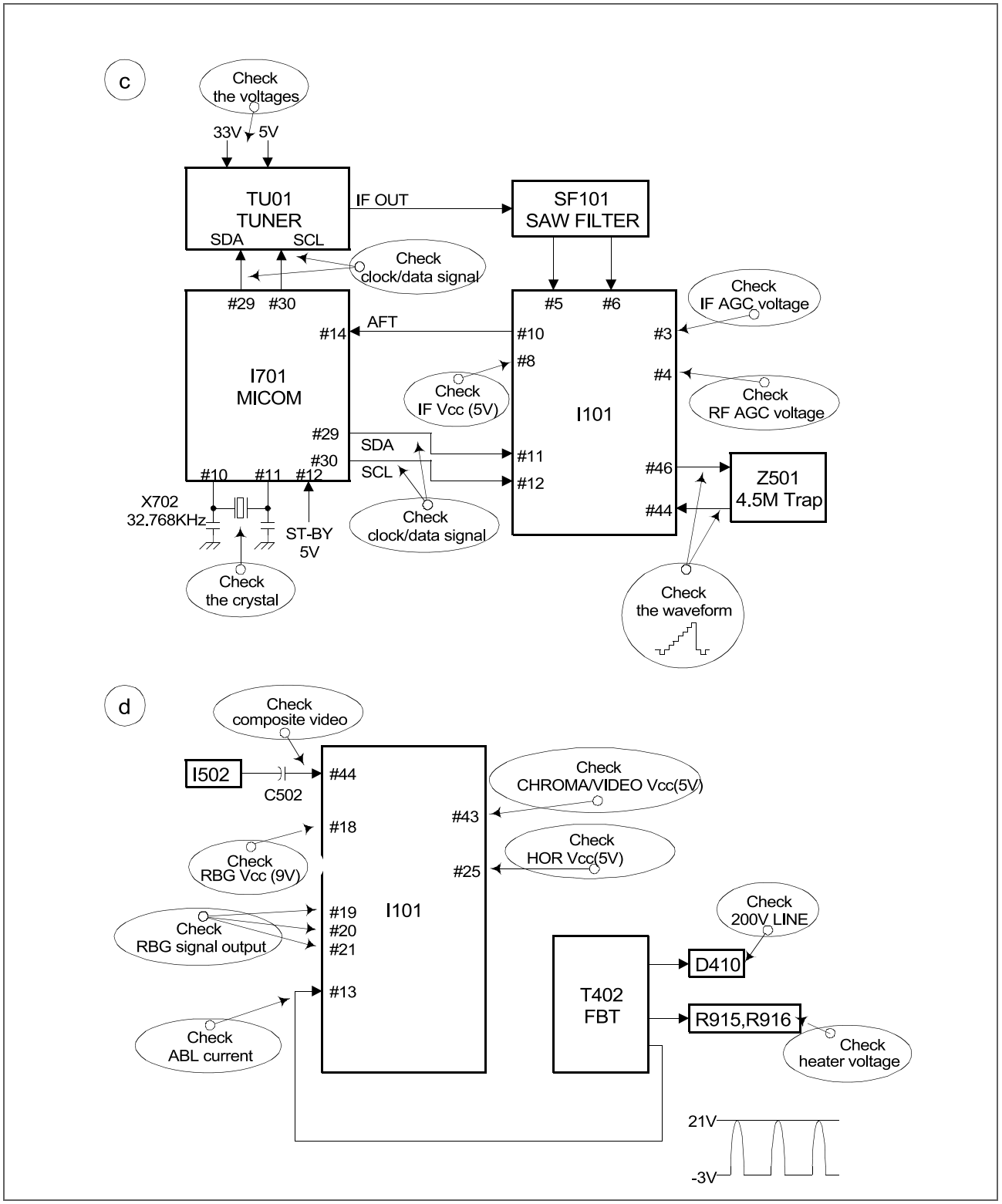
PIN	FUNCTION	PIN	FUNCTION
1	Audio Output	54	SIF Input
2	FM Output	53	SIF APC Filter
3	PIF AGC	52	SIF Output
4	RF AGC Output	51	Ext. Audio Input
5	PIF Input 1	50	APC Filter
6	PIF Input 1	49	VCO Coil 1
7	IF Ground	48	VCO Coil 2
8	IF Vcc	47	FLL Filter
9	FM Filter	46	Video Output
10	AFT Output	45	Black Level Detector
11	Bus Data	44	Internal Video Input(S-C IN)
12	Bus Clock	43	Video/Vertical Vcc
13	ABL	42	External Video Input(Y IN)
14	Red Input	41	Video/Vertical/BUS Ground
15	Green Input	40	Selected Video Output
16	Blue Input	39	DC Rest Filter
17	Fast Blanking Input	38	3.58MHz Crystal
18	RGB Vcc	37	Clamp Filter
19	Red Output	36	Chroma APC Filter
20	Green Output	35	fsc(3.58MHz) Output
21	Blue Output	34	XRAY
22	East/West Output	33	Horizontal Ground
23	Vertical Output	32	OSD Contrast(White Level)
24	Ramp ALC Filter	31	HS
25	Horizontal/BUS Vcc	30	VS
26	Horizontal AFC Filter	29	VCO IREF
27	Horizontal Output	28	Flyback Pulse Input

1. NO POWER


Check
D801(PBS606G)
Check
R802 (10W 1Ω)
L801
Z802
C805
RLY
D801
R802
PWC1
POWER CORD
F801
C803
C804
C806
check
F801(125V 5A)
R823
Q801
=> To I101 #34
R812
R813
C833
50V
T801
TSM-4242B5
C810
R810
R811
L804
L805
+132V
check voltage
D811
D819
I802
DP133
C813
D812
L807
+45V
Tuner 33V
H. DRIVE B+ 45V
C815
C816
C818
C801
I805
R818
C814
St_by
check voltage
5V
D814
L808
+15V
C821
C819
C812
L806
L802
C824
I801
STR-F6626
R824
D815
C831
R834
14.5V
SOUND B+
+14.5V
check
voltage
D807
GND
VIN
DRAIN
SOURCE
OCP
F/B
D803
C829
D804
R805
R825
C830
C808
R829
R803
D805
C834
R809
R808
C807
I803
R833
R888
R819
R806
Q802
Q803
Q806
R827

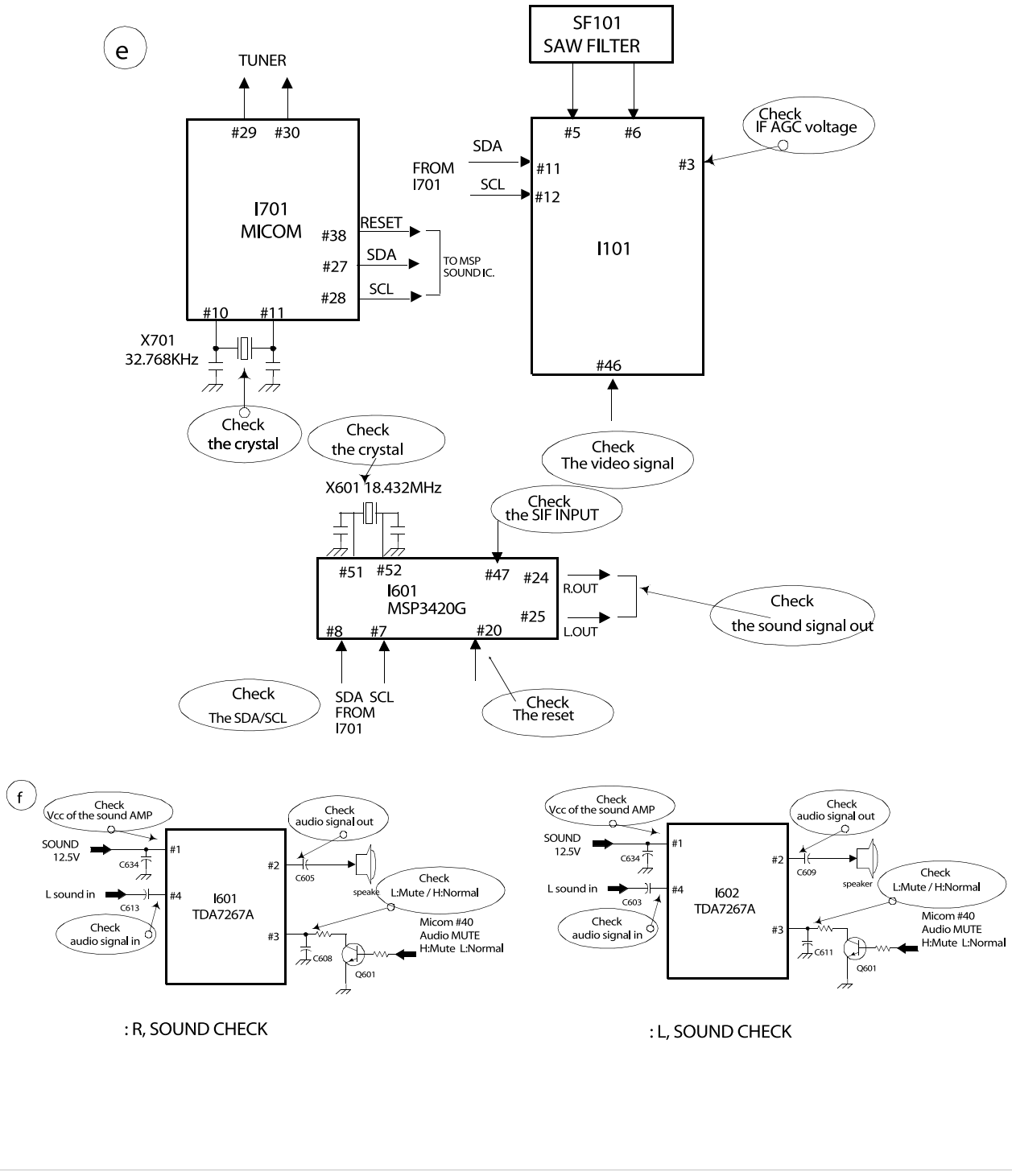
2. NO PICTURE

Check the waveform of I101 #46	NG : GO to the figure ⓒ
	OK : Go the figure ⓓ



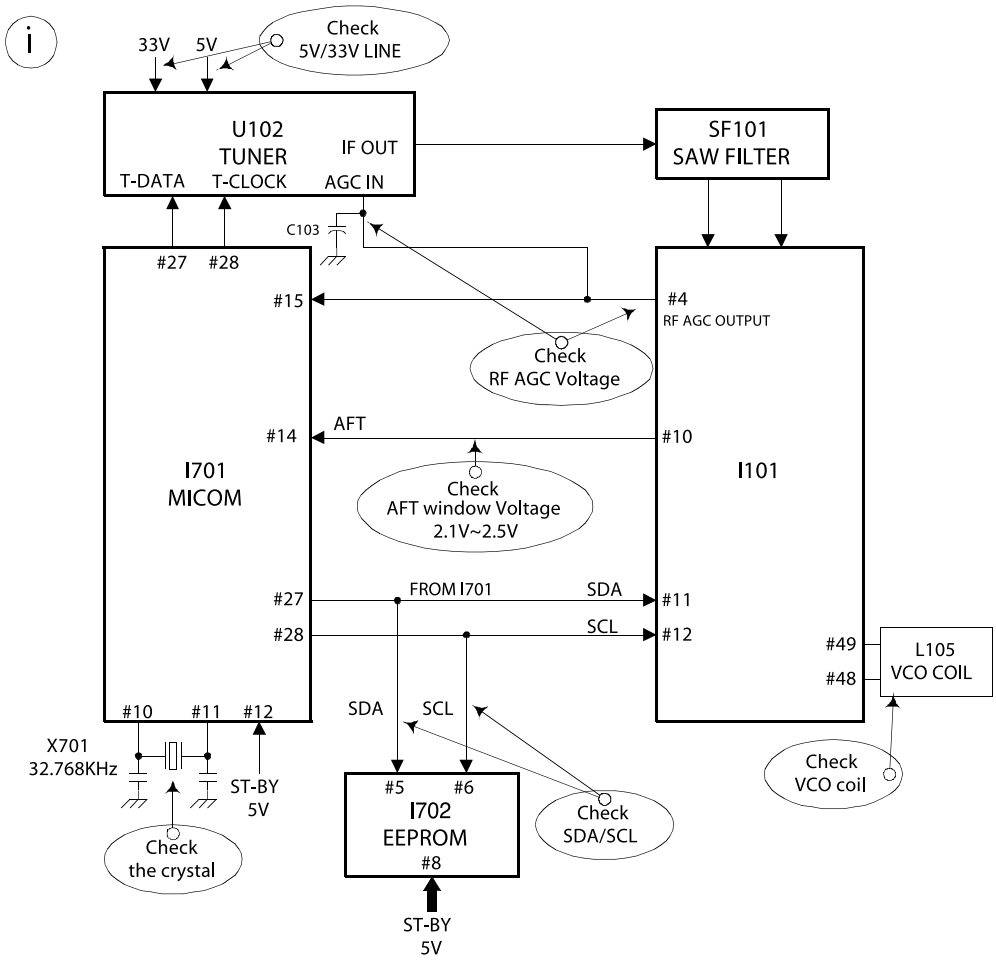
3. NO SOUND

Check audio output signal of I601 #24 #25	NG : Go to the figure ⓔ
	OK : Go to the figure ⓕ

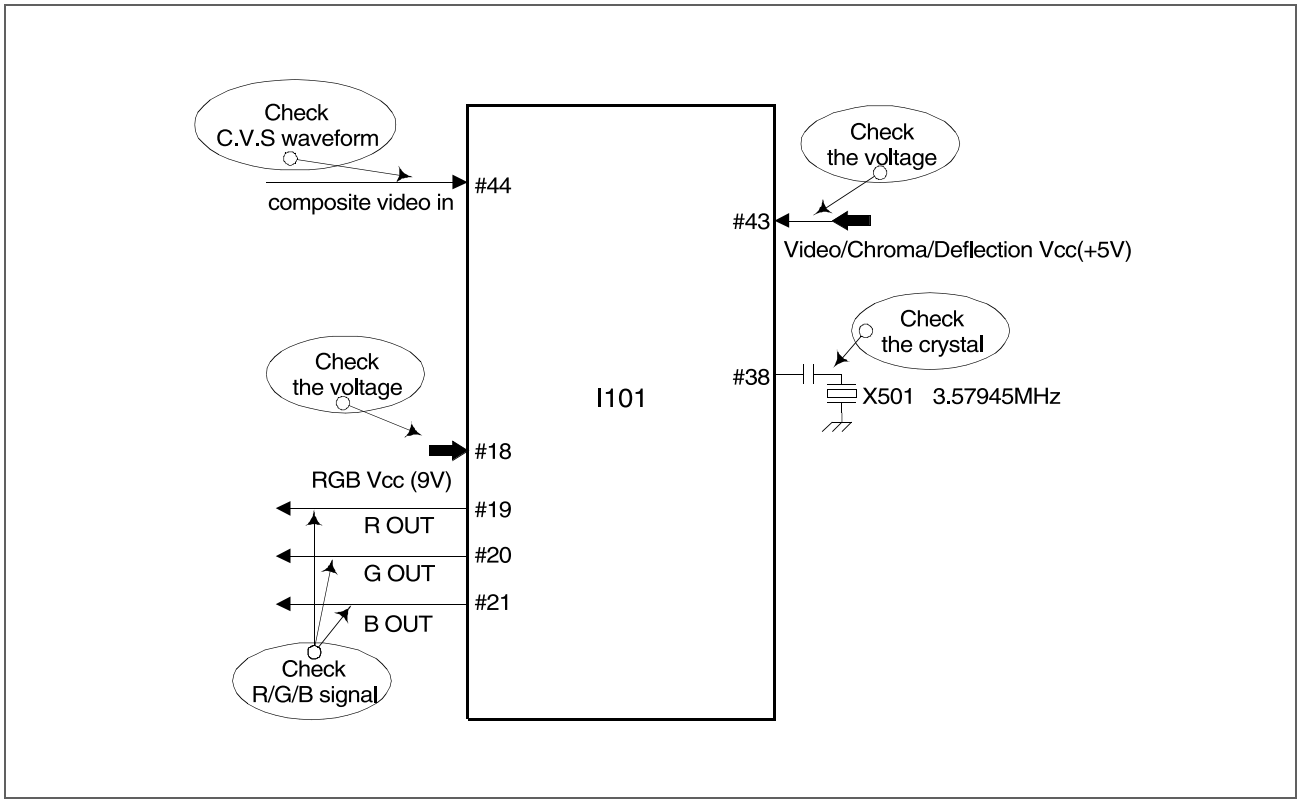


4. CH DON'T STOP

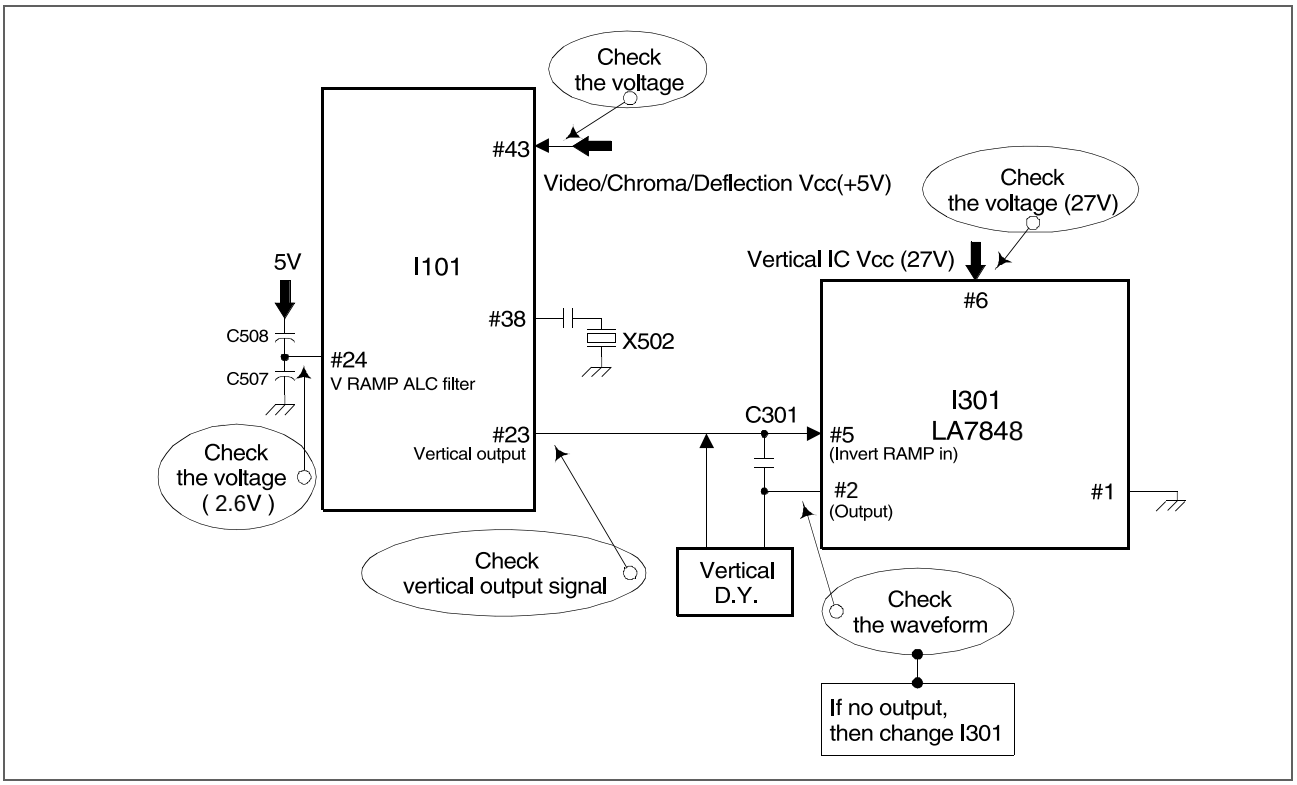
Check the input signal conditions	NG : Loss of signal or weak signal
	OK : Go to the figure ⓘ



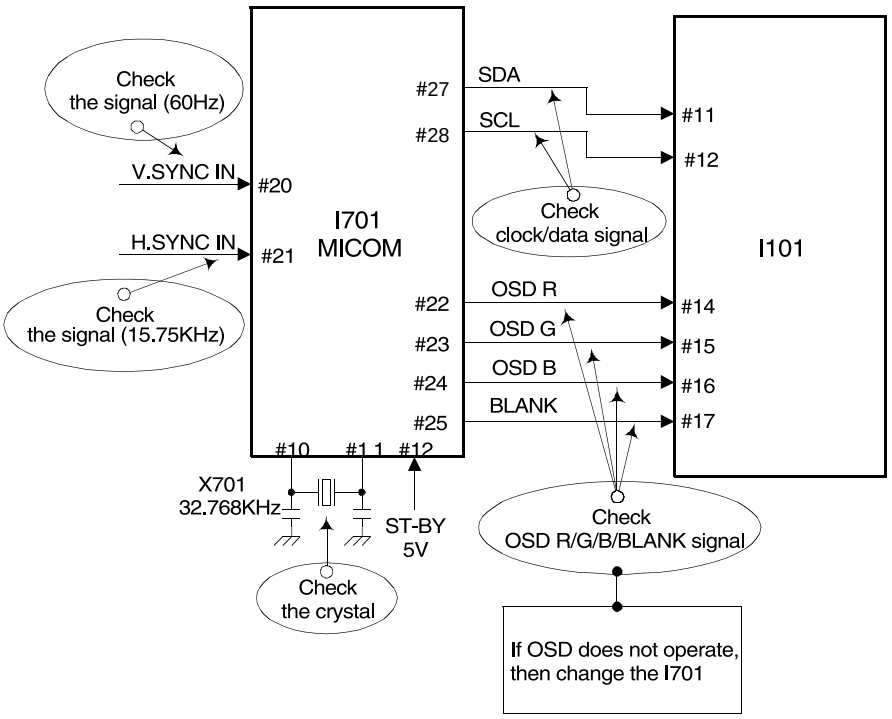
5. NO COLOR



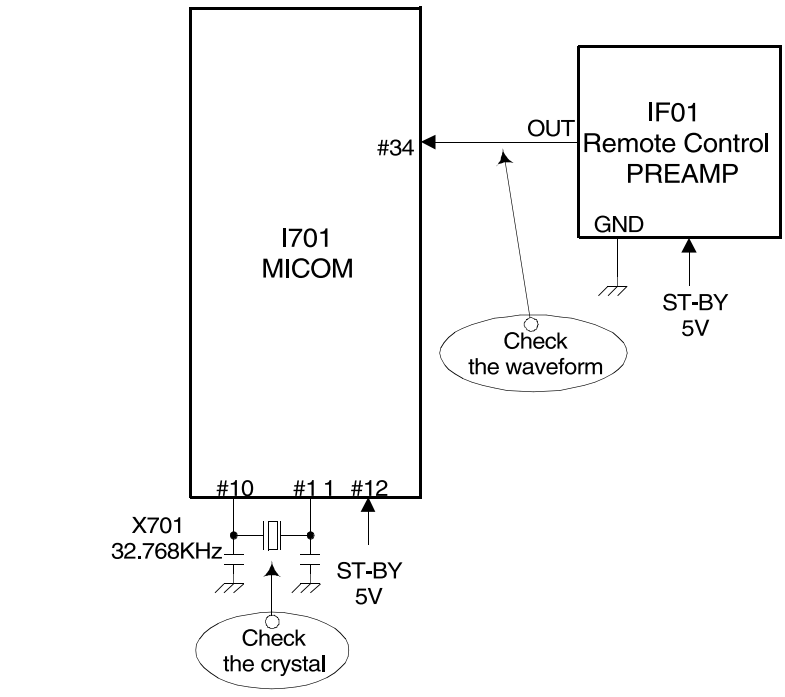
6. NO VERTICAL DEFLECTION



7. NO OSD (ON SCREEN DISPLAY)



8. NO REMOCON RECEIPT



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